# **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	89	514/2.ccls. and antitumor SAME peptide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/09/04 15:43
S20	1	"200236145".did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	·ON	2006/09/29 10:54
S21	4	"2003033012".did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 12:09
S22	2.	"6274551".did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OŖ	ON	2006/09/29 11:59
S23	0	"6274551".did. and methylhexyl	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 11:59
S24	0	"6274551".did. and (analogue or analog)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 11:59
S25	0	"6274551".did. and (analogue or analog or derivative)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON <sub>.</sub>	2006/09/29 11:59
S26	2	"20040067895".did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 12:09
S27	0	"20040067895".did. and methylhexyl	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 12:09

# **EAST Search History**

	· · ·					
S28	.0	"20040067895".did. and hexyl	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 12:09
S29	0	"20040067895".did. and methyl	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 12:09
S30	1	20040067895".did. and analog	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 12:10
S31	1	"20040067895" did. and derivative	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/09/29 13:37

# Subsequence search history

64 SEA L5 OR L6

57 SEA L3 NOT L7

L6

L7

L8

LEVIEU FUNTHER

=> Q nis L8
(FILE 'HCAPLUS, USPATFULL' ENTERED AT 09:17:18 ON 04 SEP 2007) L8 57 S L3 NOT L7
=> d que L8
L1 94 SEA FILE=REGISTRY ABB=ON PLU=ON VTVVP'ORN'ITIVFXV/SQSP
L2 81 SEA L1
L3 64 SEA L2 AND (PY<2004 OR AY<2004 OR PRY<2004 OR REVIEW/DT)
L5 64 SEA ("FAIRCLOTH GLYNN"/AU OR "FAIRCLOTH GLYNN T"/AU OR
"FAIRCLOTH GLYNN T JR"/AU OR "FAIRCLOTH GLYNN THOMAS"/AU)

1 SEA "MARCHANTE MARIA DEL CARMEN CUEVAS"/AU

# Subsequence search results

=> d ibib ed ab

L10 ANSWER 1 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:868555 HCAPLUS Full-text

DOCUMENT NUMBER: 146:219719

TITLE: Kahalalide F and ES285: potent anticancer agents from

marine molluscs

AUTHOR(S): Faircloth, G.; Cuevas, C.

CORPORATE SOURCE: PharmaMar SA, Madrid, 28770, Spain

SOURCE: Progress in Molecular and Subcellular Biology (2006),

43 (Molluscs), 363-379

CODEN: PMSBA4; ISSN: 0079-6484

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English
ED Entered STN: 28 Aug 2006

AB A review. The marine environment is proving to be a very rich source of unique compds. With significant activities against cancer of several types. Finding the sources of these new chemical entities has made it necessary for marine and medical scientists to find enterprising ways to collaborate in order to sample the great variety of intertidal, shallow and deep-water sea life. Recently these efforts resulted in a first generation of drugs from the sea undergoing clin. trials. These include PharmaMar compds.: Yondelis, Aplidin, kahalalide F, ES285 and Zalypsis. Two of these compds., kahalalide F and ES285, have been isolated from the Indopacific mollusc Elysia rufescens and the North Atlantic mollusc Spisula polynyma, resp.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d L10 2-56 ibib ed ab

L10 ANSWER 2 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:213791 HCAPLUS Full-text

DOCUMENT NUMBER: 145:179914

TITLE: Adding pharmacogenomics to the development of new

marine-derived anticancer agents

AUTHOR(S): Jimeno, Jose; Aracil, Miguel; Tercero, Juan Carlos

CORPORATE SOURCE: PharmaMar R and D, Madrid, Spain

SOURCE: Journal of Translational Medicine (2006), 4, No pp.

given

CODEN: JTMOBV; ISSN: 1479-5876 URL: http://www.translational-

medicine.com/content/pdf/1479-5876-4-3.pdf

PUBLISHER: BioMed Central Ltd.

DOCUMENT TYPE: Journal; General Review; (online computer

file)

LANGUAGE: English
ED Entered STN: 09 Mar 2006

AB A review. Nature has always been a highly productive tool in the development of anticancer therapies. Renewed interest in the potential of this tool has recently been sparked by the realization that the marine ecosystem can be used for the discovery and development of new compds. with clin. potential in advanced resistant tumors. These compds. can be incorporated into combination approaches in a chronic therapy scenario. Our marine anticancer program is using the sea to develop new agents with activity in resistant solid tumors and to identify new cellular targets for therapeutic intervention. This review describes the integration of different pharmacogenomic tools in the

development of Yondelis, Aplidin and Kahalalide F, three marine-derived compds. currently in Phase II or III development. Our results are reinforcing the targeted selectivity of these agents and opening the gates for customized therapies in cancer patients in the near future.

REFERENCE COUNT:

51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:100738 HCAPLUS Full-text

DOCUMENT NUMBER:

144:198849

TITLE:

Novel dosage form comprising modified-release and

immediate-release active ingredients

INVENTOR(S):

Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil;

Gupta, Vinod Kumar

PATENT ASSIGNEE(S):

India

SOURCE:

U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S.

Ser. No. 630,446.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006024365	A1	20060202	US 2005-134633		20050519 <
IN 2002MU00697	Α	20040529	IN 2002-MU697		20020805 <
IN 193042	A1	20040626			
IN 2002MU00699	Α	20040529	IN 2002-MU699		20020805 <
IN 2003MU00080	Α	20050204	IN 2003-MU80		20030122 <
IN 2003MU00082	Α	20050204	IN 2003-MU82		20030122 <
US 2004096499	A1	20040520	US 2003-630446		20030729 <
PRIORITY APPLN. INFO.:			IN 2002-MU697	Α	20020805 <
			IN 2002-MU699	Α	20020805 <
			IN 2003-MU80	Α	20030122 <
			IN 2003-MU82	Α	20030122 <
			US 2003-630446	A2	20030729 <

ED Entered STN: 03 Feb 2006

AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared. The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

L10 ANSWER 4 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:1321640 HCAPLUS Full-text

DOCUMENT NUMBER:

145:116379

TITLE:

Ecteinascidin 743 (ET-743; Yondelis), aplidin, and

kahalide F

AUTHOR(S):

Henriquez, Ruben; Faircloth, Glynn; Cuevas, Carmen

PharmaMar, Madrid, 28770, Spain

CORPORATE SOURCE: SOURCE:

Anticancer Agents from Natural Products (2005), 215-240, 2 plates. Editor(s): Cragg, Gordon M.;

Kingston, David G. I.; Newman, David J. CRC Press

LLC: Boca Raton, Fla.

CODEN: 69HQQY; ISBN: 0-8493-1863-7

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English ED Entered STN: 20 Dec 2005

AB A review on the first generation of drugs isolated from marine organisms, i.e., Ecteinascidin 743, Aplidin, and Kahalide F. Topics discussed include their origin, mechanisms of action, chemical synthesis, drug development, and clin. studies.

REFERENCE COUNT: 104 THERE ARE 104 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 5 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:540495 HCAPLUS Full-text

DOCUMENT NUMBER: 143:48021

TITLE: Solvent for biogenic active pharmaceutical ingredients

derived from toxins

D. T. CO.

INVENTOR(S): Weickmann, Dirk

PATENT ASSIGNEE(S): Toximed G.m.b.H., Germany SOURCE: PCT Int. Appl., 22 pp.

KENID

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DAMENIM NO

PAT	CENT	NO.			KINI	D	DATE		· ·	APPL:	ICAT:	ION 1	NO.		D	ATE		
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	R₩:	NO, TJ, BW, AZ, EE, RO,	NZ, TM, GH, BY, ES, SE,	OM, TN, GM, KG, FI, SI,	PG, TR, KE, KZ, FR,	PH, TT, LS, MD, GB, TR,	PL, TZ, MW, RU, GR,	PT, UA, MZ, TJ, HU,	RO, UG, NA, TM, IE,	RU, US, SD, AT, IS,	SC, UZ, SL, BE, IT,	SD, VC, SZ, BG, LT,	SE, VN, TZ, CH, LU,	SG, YU, UG, CY, MC,	SK, ZA, ZM, CZ, NL,	SL, ZM, ZW, DE, PL, GW,	SY, ZW AM, DK, PT,	
	1035 1699	7970	·		A1											00312 00412		
PRIORITY		ΙE,	SI,	LT,	DE, FI,				BG,	CZ, DE 20	EE, 003-	НU, 1035	PL, 7970	SK,	IS A 20	MC, 00312	211 <	<
									,	NO 20	JU4-1	DE27:	13	,	v 20	00412	210	

ED Entered STN: 23 Jun 2005

The invention relates to a solvent for biogenic active pharmaceutical ingredients, which is basically comprised of the following components: (a) 7 mL of the homeopathic substance Tarantula D4 intermingled in 15 mL of a 0.9 % NaCl solution as basic component; (b) up to 0.5 of a saturated solution of the entire poisonous cocktail from spiders of the species Loxosceles laeta, or Loxosceles gaucho, or Loxosceles Mallorca, or Loxosceles Menorca is added to the basic component, (c) the entire poisonous cocktail is ground into an anhydrous formic acid depending on the required quant. proportions, 1 to 2 mL of the entire exts. of poisons of bulldog ants being in turn added thereto, wherein said amount relates to a total amount of 10 mL of the entire poisonous cocktail.

L10 ANSWER 6 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:409543 HCAPLUS Full-text

DOCUMENT NUMBER:

142:457053

TITLE:

SOURCE:

Human protein IAP (inhibitor of apoptosis protein) nucleobase oligomers, including dsRNA, shRNA, and siRNA, and their use for enhancing apoptosis in

cancer therapy

INVENTOR(S):
PATENT ASSIGNEE(S):

Lacasse, Eric; McManus, Daniel Aegera Therapeutics, Inc., Can.

PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D -	DATE			APPL	ICAT	ION 1	.00		D	ATE		
WO	2005	0425	58		A1		2005	0512	1	WO 2	004-	CA19	02		2	0041	 029 <-	
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US	2005	1485	35		A1		2005	0707		US 2	004-	9759	74		20	0041	028 <-	
CA	2542	904			A1		2005	0512	(	CA 2	004-	2542	904		20	0041	029 <-	
EP	EP 1682565						2006	0726		EP 2	004-	7898	9		20	0041	)29 <-	
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JP	2007	5104	8 0		T		2007	0426		JP 2	006-	5370:	24		20	0041	029 <-	
PRIORIT	Y APP	LN.	INFO	.:						US 2	003-	5161	92P	]	P 20	0031	030 <-	
									1	WO 2	004-	CA19	02	Ţ	W 20	0041	029	

ED Entered STN: 13 May 2005

The invention provides nucleobase oligomers and oligonucleotide duplexes that AΒ inhibit expression of an IAP (inhibitor of apoptosis protein), and methods for using them to induce apoptosis in a cell. Specifically, the invention provides nucleic acid sequences for siRNAs and shRNAs that target human XIAP, HIAP-1 or HIAP-2 genes. The nucleobase oligomers and oligomer complexes of the present invention may also be used to form pharmaceutical compns. invention also features methods for enhancing apoptosis in a cell by administering a nucleobase oligomer or oligomer complex of the invention in combination with a chemotherapeutic or chemosensitizing agent. RNAi sequences and vectors producing shRNA (short hairpin RNA) were transfected into HeLa cells and evaluated for their effect on XIAP, cIAP-1, or cIAP-2 protein levels. XIAP protein could also be reduced by RNAi clones in transfected breast cancer cell line MDA-MB-231. In addition, cell survival was reduced in XIAP RNAi transfected breast cancer cell line after the transfected cells were treated with TRAIL (tumor necrosis factor-related apoptosis inducing ligand).

L10 ANSWER 7 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:409357 HCAPLUS Full-text

DOCUMENT NUMBER:

142:457052

TITLE:

Sequences of antisense IAP (inhibitor of apoptosis protein) oligomers and their use for treatment of

proliferative diseases with a chemotherapeutic agent

Lacasse, Eric; McManus, Daniel; Durkin, Jon P.

PATENT ASSIGNEE(S): Aegera Therapeutics, Inc., Can.

SOURCE:

PCT Int. Appl., 285 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

INVENTOR(S):

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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ED Entered STN: 13 May 2005

The invention claims the use of an antisense oligomer to human XIAP, IAP-1 or AΒ IAP-2 genes and a chemotherapeutic agent, and compns. and kits thereof, for the treatment of proliferative diseases. The invention further claims sequences for nucleobase oligomers that are antisense IAP (inhibitor of apoptosis protein) oligomers. The antisense IAP nucleobase oligomers specifically hybridize with polynucleotides encoding an IAP and reduce the amount of an IAP protein produced in a cell. Thus by reducing the IAP protein, the invention provides methods for inducing cancer cells to undergo apoptosis and for overriding anti-apoptotic signals in cancer cells. As an example of the invention, mice with s.c. H460 human lung carcinoma xenografts were injected intratumorally with XIAP antisense mixed-base 2'-O-Me RNA oligonucleotides (C5 and/or G4) and the drug vinorelbine. At the end of the 24 d treatment period, the mean relative tumor growth was reduced .apprx.70% in treated mice. The inhibition of tumor growth was correlated with downregulation of human XIAP protein expression and an increased number of dead cells. The mice did not show any signs of cytotoxicity such as body weight loss.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:283298 HCAPLUS Full-text

6

DOCUMENT NUMBER: 142:349042
TITLE: Combinations of chlorpromazine compounds and antiproliferative drugs for the treatment of neoplasms
INVENTOR(S): Lee, Margaret S.; Nichols, James M.; Zhang, Yanzhen;

Keith, Curtis

PATENT ASSIGNEE(S): SOURCE:

Combinatorx, Incorporated, USA

PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

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PATENT NO.
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    WO 2005027842
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                                            NO 2006-1325
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PRIORITY APPLN. INFO.:
                                            US 2003-504310P
                                                              P 20030918 <--
                                                               A 20030207 <--
                                            US 2003-359834
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WO 2004-US3021

W 20040203

WO 2004-US30368 W 20040916

OTHER SOURCE(S): MARPAT 142:349042

ĒD Entered STN: 01 Apr 2005

AB The invention discloses a method for treating a patient having a cancer or other neoplasm by administering chlorpromazine or a chlorpromazine analog and an antiproliferative agent simultaneously or within 14 days of each other in amts. sufficient to treat the patient.

L10 ANSWER 9 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:239012 HCAPLUS Full-text

DOCUMENT NUMBER: 142:298335

TITLE: Preparation of kahalalide F analogs as antitumor

agents

INVENTOR(S): Albericio Palomera, Fernando; Fernandez Donis,

> Ariadna; Giralt Lledo, Ernest; Gracia Cantador, Carolina; Lopez Rodriguez, Pilar; Varon Colomer, Sonia; Cuevas Marchante, Carmen; Lopez Macia, Angel;

Francesch Solloso, Andres; Jiminez Garcia,

Jose-Carlos; Royo Exposito, Miriam

PATENT ASSIGNEE(S): Pharma Mar, S.A.U., Spain; Ruffles, Graham Keith

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.	_	KIND				LICAT				DATE	
WO 200	5023846		A1	20050	0317						2004	0909 <
W:				AT, AU,								
				CZ, DE,								
				HU, ID,								
				LU, LV,								
				PH, PL,								
				TT, TZ,								
RW	BW, GH	GM,	KE,	LS, MW,	MZ,	NA, SD	, SL,	SZ,	TZ,	UG,	ZM, ZW	, AM,
	AZ, BY	KG,	ΚZ,	MD, RU,	ТJ,	TM, AT	BE,	BG,	CH,	CY,	CZ, DE	, DK,
	EE, ES	FI,	FR,	GB, GR,	HU,	IE, IT	LU,	MC,	NL,	PL,	PT, RO	, SE,
	SI, SK	TR,	BF,	BJ, CF,	CG,	CI, CM,	GA,	GN,	GQ,	GW,	ML, MR	, NE,
	SN, TD	TG										
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CA 253	7128		A1	20050	0317	CA 2	2004-	2537	128		2004	0909 <
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R:	AT, BE											
	IE, SI	LT,	LV,	FI, RO,	MK,	CY, AL	TR,	BG,	CZ,	EE,	HU, PL	, SK, HR
CN 1849												0909 <
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	SPA02741											0309 <
	•		A1	20070	0524	US 2	2006-	5707	34		2006	1018 <
PRIORITY API	PLN. INFO	).:				GB 2	2003-	2106	6	Ž	A 2003	0909 <
						WO 2	2004-	GB38	47	1	W 2004	0909

OTHER SOURCE(S): MARPAT 142:298335

ED Entered STN: 18 Mar 2005

AB The invention relates to new analogs of kahalalide F in which one or more exocyclic or cyclic amino acids has been substituted by other natural or nonnatural amino acids, masked with organic groups, or been removed or in which the terminal 5-methylhexanoyl (5-MeHex) group has by substituted by other acyl groups or been removed. Thus, [(4S)-MeHex14]-kahalalide F was

prepared by the solid-phase method and assayed for cytotoxic activity against various cell lines.

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN 2005:95095 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:52574

TITLE: Technology evaluation: Kahalalide F, PharmaMar

AUTHOR(S): Hamann, Mark T.

CORPORATE SOURCE: The School of Pharmacy and Department of Chemistry and

Biochemistry, University of Mississippi, MS, 38677,

USA

SOURCE: Current Opinion in Molecular Therapeutics (2004),

6(6), 657-665

CODEN: CUOTFO; ISSN: 1464-8431

PUBLISHER: Thomson Scientific DOCUMENT TYPE: Journal; General Review

LANGUAGE: English ED Entered STN: 03 Feb 2005

A review. Kahalalide F is a depsipeptide under development by PharmaMar as a potential treatment for solid tumors. It is currently undergoing phase II

clin. trials.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:34709 HCAPLUS Full-text

DOCUMENT NUMBER: 142:100283

TITLE: Combination of hemocyanin from spiders with

dolastatine form Dolabella for the treatment of

prostate cancer Weickmann, Dirk

PATENT ASSIGNEE(S): Toximed G.m.b.H., Germany SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: DAMENIE NO

INVENTOR(S):

	PA	rent :	NO.			KIN	D	DATE		į	APPL	ICAT:	ION I	NO.		Di	ATE		
	WO	2005	0024	94		A2	_	2005	0113	,	WO 2	004-	DE13	86		2	0040	701 <	
	WO	2005	0024	94		А3		2005	0224										
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
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									IL,										
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	NO, NZ, ON																		
									UA,										
		RW:							MZ,										
									TJ,									· ·	
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
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				TD,											•	·	•	•	
	DE	1032	9847			A1		2005	0120		DE 2	003-	1032	9847		2	0030	702 <	
PRIO	RIT	APP	LN.	INFO	. :						DE 2	003-	1032	9847		A 2	0030	702 <	
ED	Ent	ered	STN	: 1	4 Ja	n 20	05												

The invention concerns a combination of (a) hemocyanin from the hemolymphs of certain bird-eating spiders; (b) substances that are antagonists, synergists, and penetration enhancers to hemocyanin and that are obtained from the fractionation of spider venoms; (c) dolastatine form Dolabella auricularia or a preparation named Kahalalide F from Elysia rufescens. Hemocyanine, antagonists, synergists, and penetration enhancers are isolated by various chromatog. methods; the fractions or their mixts. are lyophilized for storage. For formulation, isotonic solution, buffer, albumin, glutamine, antimicrobial agent, etc. are added.

L10 ANSWER 12 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:354967 HCAPLUS Full-text

DOCUMENT NUMBER:

140:357671

TITLE:

Preparation of kahalalide antitumoral compounds Faircloth, Glynn Thomas; Elices, Mariano; Sasak,

Halina; Aviles Marin, Pablo Manuel; Cuevas Marchante,

Maria Del Carmen

PATENT ASSIGNEE(S):

Pharma Mar, S.A.U., Spain PCT Int. Appl., 34 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	rent	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		Di	ATE	
	2004				A2		2004			WO 2	003-	US33	207		2	0031	020 <
WO	2004						2004										
	₩:						ΑU,										
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
				-			IL,					•	•	•			
							MA,										
		OM,	PG,	PH,	PL,	PT;	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,
		TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
							IE,										
							CM,										
WO	2003						2003									•	018 <
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							IN,										
							MD,										
							SE,										
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							TM,										
							IT,										
							GQ,								,	20,	01/
CA	2501		•	·	A1		2004					2501			20	0031	020 <
ΑU	2003	2859	11		A1		2004	0504				2859			_		020 <
BR	2003	01548	89		Α		2005										020 <
	1572				A2		2005										020 <
	R:	AT,	BE,	CH.	DE.		ES,										
							RO,										,
JP	2006				T		2006										020 <
					_												418 <
	2005						2005										513 <

US 2006234920	A1	20061019	US	2006-531533		20060425 <
PRIORITY APPLN. INFO.:			WO	2002-GB4735	Α	20021018 <
			GB	2003-4367	Α	20030226 <
			GB	2003-14725	Α	20030624 <
			US	2001-348449P	P	20011019 <
			WO	2001-GB4821	Α	20011031 <
			GB	2002-22409	Α	20020926 <
			WO	2003-US33207	W	20031020 <

ED Entered STN: 30 Apr 2004

AB The invention is directed to new kahalalide antitumoral compds., in particular to analogs of kahalalide F, which are useful as antitumoral, antiviral and antifungal agents and in the treatment of psoriasis. Thus, kahalalide F analogs in which the 5-methylhexanoc acid residue has been replaced by (S)-and (R)-4-methylhexanoic acid were prepared and assayed for cytotoxic activity against various cell lines.

L10 ANSWER 13 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:28665 HCAPLUS Full-text

DOCUMENT NUMBER: 141:140738

TITLE: Conformational analysis of natural marine

cyclopeptides with anti-tumor properties

AUTHOR(S): Giralt, Ernest; Gairi, Margarida; Salvatella, Xavier;

Rodriguez-Mias, Ricard Aleix; Jimenez, Jose Carlos; Lopez-Macia, Angel; Caba, Josep Maria; Cardenas, Francisco; Feliz, Miguel; Lloyd-Williams, Paul;

Albericio, Fernando

CORPORATE SOURCE: Institut de Recerca Biomedica de Barcelona (IRBB-PCB),

Universitat de Barcelona, Barcelona, 08028, Spain Peptides 2002, Proceedings of the European Peptide Symposium, 27th, Sorrento, Italy, Aug. 31-Sept. 6,

2002 (2002), 758-759. Editor(s): Benedetti,

Ettore; Pedone, Carlo, Edizioni Ziino: Castellammare

di Stabia, Italy.

CODEN: 69EYXG; ISBN: 88-900948-1-8

DOCUMENT TYPE: Conference LANGUAGE: English ED Entered STN: 14 Jan 2004

SOURCE:

AB A symposium report. Conformations of three natural marine cyclopeptides (aplidine, kahalalide F and trunkamide A) with antitumor properties are studied using NMR and mol. dynamics calcns. Aplidine exists in CHCl3 as an approx. 1:1 mixture of two slowly interconverting conformations. These conformational changes have no implications in the conformation of the ring that is a very well-defined eight-shaped macrocycle stabilized by a transannular hydrogen bond. Kahalalide F, a depsipeptide, has a flexible tail and a quite rigid macrocycle. Conformation of trunkamide A is observed to be very rigid, dominated by the volume of the dimethylallyl side chains, includes two trans-annular hydrogen bonds, and has two conformationally-restricted residues in the primary structure.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:861296 HCAPLUS Full-text

DOCUMENT NUMBER: 140:77392

TITLE: Stereochemistry of Kahalalide F

AUTHOR(S): Bonnard, Isabelle; Manzanares, Ignacio; Rinehart,

Kenneth L.

CORPORATE SOURCE: Roger Adams Laboratory, Department of Chemistry, University of Illinois at Urbana-Champaign, Urbana,

IL, 61801, USA

SOURCE: Journal of Natural Products (2003), 66(11),

1466-1470

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:77392

ED Entered STN: 04 Nov 2003

AΒ The stereochem. of the amino acids in the marine-derived cyclic depsipeptide kahalalide F has been defined by a series of degradation reactions (hydrolysis, ozonolysis, Edman degradation, and Marfey derivatization), yielding smaller fragments of the marine natural product. The results from these reactions agree with the structure originally proposed by Hamann and Scheuer and with the same stereochem. of most of the component amino acids more recently proposed by Goetz, Yoshida, and Scheuer. However, our assignments of D-Val3 and L-Val4 are the reverse of previous assignments made as L-Val3 and D-Val4. The present (reversed) stereochem. is crucial for the antitumor activity of kahalalide F.

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 12 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:848751 HCAPLUS Full-text

DOCUMENT NUMBER: 140:385585

TITLE: In vitro toxicity of three new antitumoral drugs

(trabectedin, aplidin, and kahalalide F) on hematopoietic progenitors and stem cells

Gomez, Susana G.; Bueren, Juan A.; Faircloth, Glynn AUTHOR(S):

T.; Jimeno, Jose; Albella, Beatriz

.CORPORATE SOURCE:

PharmaMar, Madrid, Spain SOURCE:

Experimental Hematology (New York, NY, United States)

(2003), 31(11), 1104-1111 CODEN: EXHMA6; ISSN: 0301-472X

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 30 Oct 2003

AB Objective: In addition to neutropenias and/or thrombocytopenias as a shortterm effect, antineoplastics also can produce long-term effects as a consequence of damage to the hematopoietic stem cells. The aim of the present study was to evaluate the toxicity of three marine-derived antineoplastics on murine hematopoietic stem cells. These antitumoral compds. currently are being evaluated in patients in phase II (aplidin and kahalalide F) and phase II/III (trabectedin) clin. trials. Materials and methods: Long-term competitive repopulating assays were performed in mice to analyze toxic effects on the hematopoietic stem cells responsible for the multipotential long-term repopulation of hematopoiesis. Furthermore, granulocytic and T- and B-lymphoid lineages were studied, as well as myeloid (CFU-GM) and megakaryocytic (CFU-Meg) progenitors. Results: When cells were treated in vitro for 24 h with CFU-GM IC50 dose of trabectedin (9.59  $\pm$  4.96 nM), no significant effects were observed in the stem cells. The dose of trabectedin that produced 90% of inhibition in CFU-GM (IC90: 23.71 ± 1.27 nM) only inhibited 45% survival of stem cells. Doses of aplidin that produced redns. of 50% (56.9  $\pm$  13.32 nM) or 90% (195.88  $\pm$  21.39 nM) in myeloid progenitors did not show any effect on hematopoietic stem cells. Kahalalide F did not show any toxic effect in either short-term or long-term repopulating cells up to 10  $\mu M$ . Conclusions. Our data show that the hematopoietic stem cells effects of antitumoral drugs can be properly characterized by the murine competitive repopulating assays. Our results suggest that long-term myelosuppression as a

consequence of trabectedin, aplidin, or kahalalide F treatment would not be expected.

REFERENCE COUNT:

51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 16 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:800266 HCAPLUS Full-text

DOCUMENT, NUMBER:

140:156903

TITLE:

Kahalalide F, a new marine-derived compound, induces

oncosis in human prostate and breast cancer

cells

Suarez, Yajaira; Gonzalez, Laura; Cuadrado, Ana; AUTHOR(S):

Berciano, Maite; Lafarga, Miguel; Munoz, Alberto

CORPORATE SOURCE:

Pharma Mar S.A., Instituto de Investigaciones Biomedicas "Alberto Sols", Consejo Superior de Investigaciones Cientificas-Universidad Autonoma de

Madrid, Madrid, Spain

SOURCE:

Molecular Cancer Therapeutics (2003), 2(9),

863-872

CODEN: MCTOCF; ISSN: 1535-7163

PUBLISHER:

American Association for Cancer Research

DOCUMENT TYPE:

Journal English

LANGUAGE: ED

Entered STN: 13 Oct 2003

Kahalalide F (KF) is a novel antitumor drug of marine origin under clin. AΒ investigation. KF showed a potent cytotoxic activity against a panel of human prostate and breast cancer cell lines, with IC50 ranging from 0.07  $\mu M$  (PC3) to 0.28 µM (DU145, LNCaP, SKBR-3, BT474, MCF7). Importantly, nontumor human cells (MCF10A, HUVEC, HMEC-1, IMR90) were 5-40 times less sensitive to the drug (IC50 =  $1.6-3.1 \mu M$ ). KF cytotoxicity did not correlate with the expression level of the multidrug resistance MDR1 and of the Tyr kinase HER2/NEU, and only slightly by the anti-apoptotic BCL-2 protein. KF action was triggered rapidly by short pulse treatments (15 min caused 50% maximum cytotoxicity). Neither a general caspase inhibitor (Z-VAD-fmk) nor transcription or translation inhibitors (actinomycin D, cycloheximide) blocked KF action. Flow cytometry anal. revealed that KF induced neither cell-cycle arrest nor apoptotic hypodiploid peak. Using mitochondrial (JC-1) - and lysosomal (LysoTracker Green, Acridine Orange) - specific fluorophores, the authors detected loss of mitochondrial membrane potential and of lysosomal integrity following KF treatment. Confocal laser and electron microscopy revealed that KF-treated cells underwent a series of profound alterations including severe cytoplasmic swelling and vacuolization, dilation and vesiculation of the endoplasmic reticulum, mitochondrial damage, and plasma membrane rupture. In contrast, the cell nucleus showed irregular clumping of chromatin into small, condensed masses, while chromatin disappeared from other nuclear domains, but the nuclear envelope was preserved and no DNA degradation was detected. Together, these data indicate that KF induces cell death via oncosis preferentially in tumor cells.

REFERENCE COUNT:

29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 17 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN 2003:509479 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

140:146458

TITLE:

Kahalalide F: synthesis and structural determination

AUTHOR(S):

Lopez-Macia, Angel; Jimenez, Jose Carlos; Royo, Miriam; Giralt, Ernest; Albericio, Fernando

CORPORATE SOURCE:

Department of Organic Chemistry, University of

Barcelona, Barcelona, E-08028, Spain

SOURCE:

Peptides 2000, Proceedings of the European Peptide Symposium, 26th, Montpellier, France, Sept. 10-15,

2000 (2001), Meeting Date 2000, 245-246.

Editor(s): Martinez, Jean; Fehrentz, Jean-Alain.

Editions EDK: Paris, Fr.

CODEN: 69EDWK; ISBN: 2-84254-048-4

DOCUMENT TYPE: LANGUAGE:

Conference English

ΕD Entered STN: 04 Jul 2003

AB A symposium report. Kahalalide F is a cyclic depsipeptide isolated from the

Sacoglossan mollusc Elysia rufescens and the green alga Bryopsis sp.

Kahalalide F and a diastereomer were prepared by the solid-phase method and

their structures determined by 1H NMR.

6

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER:

2003:456011 HCAPLUS Full-text

DOCUMENT NUMBER:

139:390403

TITLE:

Development of marine-derived anti-cancer

compounds

AUTHOR(S):

Taguchi, Tetsuo

CORPORATE SOURCE:

Osaka University, Japan

SOURCE:

Gan to Kagaku Ryoho (2003), 30(5), 579-588

CODEN: GTKRDX; ISSN: 0385-0684

PUBLISHER: DOCUMENT TYPE: Gan to Kagaku Ryohosha Journal; General Review

Japanese LANGUAGE: ED Entered STN: 15 Jun 2003

A review. The marine environment offers a rich source of natural products AΒ with potential therapeutic application. Marine organisms have evolved the enzymic capability to produce potent chemical entitles that make them promising sources of innovative cytotoxic compds. Prominent in the identification and development of novel anti-cancer agents from marine sources is the Spanish biotechnol. company, Pharma Mar, which currently has a large number of oncol. products in late preclin. and clin. development. These include: Ecteinascidin-743 (ET-743), Aplidin, Kahalalide F and ES-285. Many of these innovative compds. have novel mechanisms of antitumor action that have yet to be fully elucidated.

L10 ANSWER 19 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER:

2003:425678 HCAPLUS Full-text

DOCUMENT NUMBER:

140:111653

TITLE:

Solid-phase synthesis of marine cyclic

peptides with antitumoral activity

AUTHOR(S):

Lopez-Macia, Angel; Caba, Josep M.; Jimenez, Jose C.; Salvatella, Xavier; Varon, Sonia; Royo, Miriam; Rodriguez, Ignacio; Manzanares, Ignacio; Giralt,

Ernest; Albericio, Fernando

CORPORATE SOURCE:

Department of Organic Chemistry, University of

Barcelona, Barcelona, 08028, Spain

SOURCE:

Innovation and Perspectives in Solid Phase Synthesis &

Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemistry

Diversity, Collected Papers, International Symposium, 7th, Southampton, United Kingdom, Sept. 18-22, 2001 (

2002), Meeting Date 2001, 13-16. Editor(s):

Epton, Roger. Mayflower Worldwide Ltd.: Kingswinford,

UK.

CODEN: 69DYT7; ISBN: 0-9515735-4-3

DOCUMENT TYPE: Conference LANGUAGE: English Entered STN: 04 Jun 2003

A symposium report. Two cyclic peptides, kahalalide F and trunkamide A, were AB prepared by the solid phase method and are currently in clin. phase I and preclin. trials for treatment of cancer, resp. Kahalalide F is a cyclic

tridecapeptide containing an ester bond between two  $\beta$ -branched and sterically hindered amino acids, didehydroamino butyric acid, and a hydrophobic sequence with two fragments containing several  $\beta$ -branched amino acids in a row. Trunkamide A is a cyclic heptapeptide which contains hydroxy side-chain amino

acids with the hydroxy function modified as dimethylallyl ethers and a

thiazoline ring.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:319736 HCAPLUS Full-text

DOCUMENT NUMBER: 138:331673

TITLE: Kahalalide compounds for use in cancer

INVENTOR(S): Jimeno, Jose; Lopez, Lazaro Luis; Ruiz Casado, Ana;

Izquierdo, Miguel Angel; Paz-Ares, Luis; Trigo, Jose

Manuel; Schellens, Jan

PATENT ASSIGNEE(S): Pharma Mar, S.A., Spain; Ruffles, Graham Keith

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PAT	ENT	ΝΟ.			KIN	D -	DATE			APPL	ICAT	ION	NO.		D	ATE	
WO	2003	0330	12		A1		2003	0424		WO 2	002-	GB47	35		2	0021	018 <
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
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		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
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		KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
WO	2002	0361	45		A2		2002	0510		WO 2	001-	GB48	21		. 20	0011	031 <
WO	2002	0361	45		A3		2002	1017									
	₩:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
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OTHER SOURCE(S):
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ED
     Entered STN:
                   25 Apr 2003
AB
     Procedures for clin. trials of kahalalide compds. are provided, leading to new
      formulations of kahalalide compds.
REFERENCE COUNT:
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L10 ANSWER 21 OF 56
                      HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2002:779665 HCAPLUS Full-text
DOCUMENT NUMBER:
                         138:313796
                         Quantitative analysis of the novel depsipeptide
TITLE:
                         anticancer drug Kahalalide F in human plasma by
                         high-performance liquid chromatography under basic
                         conditions coupled to electrospray ionization tandem
                         mass spectrometry
                         Stokvis, E.; Rosing, H.; Lopez-Lazaro, L.; Rodriguez,
AUTHOR(S):
                         I.; Jimeno, J. M.; Supko, J. G.; Schellens, J. H. M.;
                         Beijnen, J. H.
CORPORATE SOURCE:
                         Department of Pharmacy and Pharmacology, Slotervaart
                         Hospital/The Netherlands Cancer Institute, Amsterdam,
                         1066 EC, Neth.
SOURCE:
                         Journal of Mass Spectrometry (2002), 37(9),
                         992-1000
                         CODEN: JMSPFJ; ISSN: 1076-5174
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PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 13 Oct 2002

Kahalalide F (KF) is a novel cyclic depsipeptide anticancer drug which has AΒ shown anticancer activity both in vitro and in vivo, especially against human prostate cancer cell lines. To characterize the pharmacokinetics of KF during a phase I clin. trial in patients with androgen-refractory prostate cancer, a method was developed and validated for the quant. anal. of KF in human plasma by HPLC coupled to pos. electrospray ionization tandem mass spectrometry (ESI-MS/MS). Microbore reversed-phase liquid chromatog. (LC) performed with mobile phases containing trifluoroacetic acid, an additive commonly used for separating peptides, resulted in substantial suppression of the signal for KF in ESI-MS/MS. An alternative approach employing a basic mobile phase provided an excellent response to KF when used in the pos. ion mode. Plasma samples were prepared for LC MS/MS by solid-phase extraction on C18 cartridges. The LC separation was performed on a Zorbax Extend C18 column (150 + 2.1 mm., particle size 5  $\mu$ m) with MeCN-10 mM aqueous NH3 (85:15) as the mobile phase, at a flow-rate of 0.20 mL/min. A butyric acid analog of KF was used as the internal standard The lower limit of quantitation when using a  $500-\mu L$  sample volume was 1 ng/mL and the linear dynamic range extended to 1000 ng/mL. The interassay accuracy of the assay was -15.1% at the lower limit of quantitation and between -2.68 and -9.05% for quality control solns. ranging in concentration from 2.24 to 715 ng/mL. The interassay precision was 9.91% or better at these concns. The analyte was stable in plasma under all conditions evaluated and for a period of 16 h after reconstituting plasma exts. for LC anal. at ambient temperature

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 22 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:742571 HCAPLUS Full-text

DOCUMENT NUMBER: 139:62716

TITLE: Preclinical toxicity studies of kahalalide F, a new

anticancer agent: single and multiple dosing regimens

in the rat

AUTHOR(S): Brown, Alan P.; Morrissey, Robert L.; Faircloth, Glynn

T.; Levine, Barry S.

CORPORATE SOURCE: Toxicology Research Laboratory, University of Illinois

at Chicago, Chicago, IL, 60612, USA

SOURCE: Cancer Chemotherapy and Pharmacology (2002),

50(4), 333-340

CODEN: CCPHDZ; ISSN: 0344-5704

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 01 Oct 2002

Kahalalide F (KF) is a new anticancer agent currently in clin. trials for solid tumors, including prostate cancer. During the preclin. development of this drug, the studies reported here were conducted to determine the acute and multiple dose toxicities of KF when administered i.v. to rats. This dosing route is the intended route of clin. administration. KF was administered i.v. to male and female CD rats using single- and multiple-dose (daily for 5 days) schedules. Animals were observed for clin. signs, and body weight, hematol., and clin. chemical parameters determined Animals were necropsied, gross observations and organ wts. recorded, and numerous tissues were collected and examined microscopically. KF produced lethality at 375 and 450  $\mu g/kg$  in males and females, resp., and the maximum tolerated dose (MTD) was estimated to be 300  $\mu g/kg$  (1800  $\mu g/m2$ ). The nervous system appeared to be a potential site of

action for the production of lethality. Single-dose administration of KF at 150 and 300  $\mu$ g/kg produced organ toxicity in which the kidney was the primary Injury to distal convoluted tubules was the most toxicol. significant lesion, and was observed on day 4. However, by day 29, resolution of renal toxicity had occurred in the  $150-\mu g/kg$  group, but only partial resolution was seen at 300 µg/kg. Renal injury correlated with increased serum creatinine, BUN, and kidney wts. at 300  $\mu$ g/kg, indicating impairment of renal function. Subacute, necrotizing inflammation of bone marrow and peritrabecular osteocyte hyperplasia of bone were seen at 300  $\mu g/kg$  on day 4, with recovery thereafter. Injury to blood vessels and surrounding tissue at the injection site were produced by KF, likely due to local cytotoxicity. In general, reversibility of toxicity was seen at 150 µg/kg but not at 300 µg/kg. When KF was administered once daily for five consecutive days at a dose of 80  $\mu g/kg$  per day (400 µg/kg total dose), slightly decreased body weight gain was the primary drug-related effect. Therefore, the no-adverse-effect dose was at or near 80  $\mu$ g/kg per day (480  $\mu$ g/m<sup>2</sup> per day). These findings demonstrate that fractionation of a lethal or MTD dose of KF by daily administration for 5 days reduces drug-induced toxicity, and appears to be a viable option for the clin. evaluation of KF for the treatment of cancer.

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 23 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN 2002:692319 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

138:271948

TITLE:

Solid-phase total syntheses of trunkamide A and

kahalalide F, cyclic peptides of marine

origin

AUTHOR(S):

Albericio, Fernando; Caba, Josep M.; Lopez-Macia, Angel; Jimenez, Jose C.; Carrascal, Marta; Sole, Laia; Rodriguez, Ignacio; Manzanares, Ignacio; Royo, Miriam;

Giralt, Ernest

CORPORATE SOURCE:

Department of Organic Chemistry, University of

Barcelona, Barcelona, E-08028, Spain

SOURCE:

Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June

9-14, 2001 (2001), 217-219. Editor(s):

Lebl, Michal; Houghten, Richard A. American Peptide

Society: San Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE:

Conference LANGUAGE: English ΕD Entered STN: 13 Sep 2002

AB A symposium report. Two cyclic peptides of marine origin, Trunkamide A and Kahalalide F, were synthesized. Common features of both syntheses include solid-phase peptide chain elongation using a quasi orthogonal protecting

scheme with allyl, t-Bu, and fluorenyl based groups on a chlorotrityl resin. REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 24 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:521462 HCAPLUS Full-text

DOCUMENT NUMBER:

137:88442

TITLE:

Incensole and furanogermacrens and compounds in treatment for inhibiting neoplastic lesions

and microorganisms

INVENTOR(S):

Shanahan-Pendergast, Elisabeth

PATENT ASSIGNEE(S):

Ire.

SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PRIORITY	Y APP	LN.	INFO	.:					IE 2 WO 2					_	0010: 0020:		

OTHER SOURCE(S): MARPAT 137:88442

Entered STN: 12 Jul 2002 ED

The invention discloses the use of incensole and/or furanogermacrens, derivs. AB metabolites and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immunodysregulatory disorders. These compds. can be administered alone or in combination with conventional chemotherapeutic, antiviral, antiparasite agents, radiation and/or surgery. Incensole and furanogermacren and their mixture showed antitumor activity against various human carcinomas and melanomas and antimicrobial activity against Staphylococcus aureus and Enterococcus faecalis.

L10 ANSWER 25 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:353299 HCAPLUS Full-text

DOCUMENT NUMBER:

136:359641

TITLE:

Kahalalide F formulations for antitumor use

INVENTOR(S):

Ruffles, Graham Keith; Faircloth, Glynn Thomas; Nuyen,

Bastian; Weitman, Steve

PATENT ASSIGNEE(S): SOURCE:

Pharma Mar, S.A., Spain PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

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     Entered STN: 12 May 2002
     New formulations and new uses of kahalalide F are provided for antitumor
AB
     application against neuroblastomas or dedifferentiated or mesenchymal
     chondrosarcomas or osteosarcomas.
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ANSWER 26 OF 56
                      HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2001:924856 HCAPLUS Full-text
DOCUMENT NUMBER:
                         136:315111
                         Development of an HPLC method with UV detection for
TITLE:
                         the pharmaceutical quality control of the novel marine
                         anticancer agent kahalalide F
AUTHOR(S):
                         Nuijen, B.; Bouma, M.; Floriano, P.; Manada, C.;
                         Rosing, H.; Stokvis, E.; Kettenes-van den Bosch, J.
                         J.; Bult, A.; Beijnen, J. H.
CORPORATE SOURCE:
                         Department of Pharmacy and Pharmacology, Slotervaart
                         Hospital, The Netherlands Cancer Institute, Amsterdam,
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1066 EC, Neth.

SOURCE: Journal of Liquid Chromatography & Related

Technologies (2001), 24(20), 3141-3155

CODEN: JLCTFC; ISSN: 1082-6076

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 23 Dec 2001

Kahalalide F is a cyclic depsipeptide derived from the marine mollusc Elysia AB rufescens, an organism living in the seas near Hawaii. On the basis of its in vitro and in vivo selectivity, kahalalide F is currently developed as a potential anticancer agent against androgen independent prostate tumors. development and validation of a reversed-phase high performance liquid chromatog. (RP-HPLC) method with ultra-violet (UV) detection for the quantification and purity determination of kahalalide F in raw drug substance and pharmaceutical dosage form was described. Linear calibration curves in the range of 0.5-12.5  $\mu g/mL$  of kahalalide F with correlation coeffs. > 0.999 were obtained. Within-run and between-run precisions were ≤ 3.0% and accuracy was within 100.4-103.2%. The assay proved selective, as determined by stresstesting, confirming its stability indicating capacity. Using liquid chromatog.-mass spectrometry (LC-MS) anal., kahalalide G, the hydrolyzed openchain analog of kahalalide F, appeared upon heating and in acidic media. Furthermore, it was shown that kahalalide F remains its integrity in the freeze-dried pharmaceutical dosage form.

REFERENCE COUNT:

PUBLISHER:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 27 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:849600 HCAPLUS Full-text

DOCUMENT NUMBER: 136:99533

TITLE: Chemical defenses of the sacoglossan mollusk Elysia

rufescens and its host alga Bryopsis sp.

AUTHOR(S): Becerro, Mikel A.; Goetz, Gilles; Paul, Valerie J.;

Scheuer, Paul J.

CORPORATE SOURCE: Department of Chemistry, University of Hawaii at

Manoa, Honolulu, HI, 96822, USA

SOURCE: Journal of Chemical Ecology (2001), 27(11),

2287-2291

CODEN: JCECD8; ISSN: 0098-0331 Kluwer Academic/Plenum Publishers

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 23 Nov 2001

Sacoglossans are a group of opisthobranch mollusks that have been the source AB of numerous secondary metabolites; however, there are few examples where a defensive ecol. role for these compds. has been demonstrated exptl. We investigated the deterrent properties of the sacoglossan Elysia rufescens and its food alga Bryopsis sp. against natural fish predators. Bryopsis sp. produces kahalalide F, a major depsipeptide that is accumulated by the sacoglossan and that shows in vitro cytotoxicity against several cancer cell lines. Our data show that both Bryopsis sp. and Elysia rufescens are chemical protected against fish predators, as indicated by the deterrent properties of their exts. at naturally occurring concns. Following bioassay-guided fractionation, we observed that the antipredatory compds. of Bryopsis sp. were present in the butanol and chloroform fractions, both containing the depsipeptide kahalalide F. Antipredatory compds. of Elysia rufescens were exclusively present in the dichloromethane fraction. Further bioassay-quided fractionation led to the isolation of kahalalide F as the only compound responsible for the deterrent properties of the sacoglossan. Our data show that kahalalide F protects both Bryopsis sp. and Elysia rufescens from fish

predation. This is the first report of a diet-derived depsipeptide used as a chemical defense in a sacoglossan.

REFERENCE COUNT:

37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 28 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:846704 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 137:98856

TITLE: Development of a lyophilized parenteral pharmaceutical

formulation of the investigational polypeptide marine

anticancer agent kahalalide F

AUTHOR(S): Nuijen, B.; Bouma, M.; Talsma, H.; Manada, C.; Jimeno,

J. M.; Lopez-Lazaro, L.; Bult, A.; Beijnen, J. H.

CORPORATE SOURCE: Department of Pharmacy and Pharmacology, Slotervaart

Hospital/The Netherlands Cancer Institute, Amsterdam,

1066 EC, Neth.

SOURCE: Drug Development and Industrial Pharmacy (2001

), 27(8), 767-780

CODEN: DDIPD8; ISSN: 0363-9045

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 21 Nov 2001

Kahalalide F is a novel antitumor agent isolated from the marine mollusk AB Elysia rufescens; it has shown highly selective in vitro activity against androgen-independent prostate tumors. The purpose of this study was to develop a stable parenteral formulation of kahalalide F to be used in early clin. trials. Solubility and stability of kahalalide F were studied as a function of polysorbate 80 (0.1%-0.5% w/v) and citric acid monohydrate (5-15 mM) concns. using an exptl. design approach. Stabilities of kahalalide F lyophilized products containing crystalline (mannitol) or amorphous (sucrose) bulking agents were studied at  $+5^{\circ}$  and  $+30^{\circ}\pm60\%$  relative humidity (RH) in the dark. Lyophilized products were characterized by IR (IR) spectroscopy and differential scanning calorimetry (DSC). Recovery studies after reconstitution of kahalalide F lyophilized product and further dilution in infusion fluid were carried out to select an optimal reconstitution vehicle. It was found that a combination of polysorbate 80 and citric acid monohydrate is necessary to solubilize kahalalide F. Lyophilized products were considerably less stable with increasing polysorbate 80 and citric acid monohydrate concns., with polysorbate 80 being the major effector. A combination of 0.1% w/v polysorbate 80 and 5 mM citric acid monohydrate was selected for further investigation. Lyophilized products containing sucrose as a bulking agent were more stable compared to the products containing mannitol. The glass transition temperature of the sucrose-based product was determined to be  $+46^{\circ}$ . The amorphous state of the product was confirmed by IR anal. A solution composed of Cremophor EL, ethanol, and water for injection (5%/5%/90% volume/volume/v CEW) kept kahalalide F in solution after reconstitution and further dilution with 0.9% w/v sodium chloride (normal saline) to 1.5  $\mu g/m$ . A stable lyophilized formulation was presented containing 100  $\mu g$  of kahalalide F, 100 mg sucrose, 2.1 mg citric acid monohydrate, and 2 mg polysorbate 80 to be reconstituted with a vehicle composed of 5%/5%/90% volume/volume/v CEW and to be diluted further using normal saline.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 29 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:781497 HCAPLUS Full-text

DOCUMENT NUMBER: 136:86050

TITLE: Synthesis and Structure Determination of Kahalalide F

AUTHOR(S): Lopez-Macia, Angel; Jimenez, Jose Carlos; Royo,

Miriam; Giralt, Ernest; Albericio, Fernando

CORPORATE SOURCE: Department of Organic Chemistry, University of

Barcelona, Barcelona, 08028, Spain

SOURCE: Journal of the American Chemical Society (2001

), 123(46), 11398-11401

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:86050

ED Entered STN: 28 Oct 2001

Kahalalide F, the only member of the kahalalide peptide family with important AB bioactivity, is in clin. trials for treatment of prostate cancer. An efficient solid-phase synthetic approach is reported. Kahalalide F presents several synthetic difficulties: (i) an ester bond between two  $\beta$ -branched and sterically hindered amino acids; (ii) a didehydroamino acid; and (iii) a rather hydrophobic sequence with two fragments containing several  $\beta$ -branched amino acids in a row, one of them terminated with a saturated aliphatic acid. The cornerstones of our strategy were (i) a quasiorthogonal protecting system with allyl, tert-Bu, fluorenyl, and trityl-based groups, (ii) azabenzotriazole coupling reagents, (iii) formation of the didehydroamino acid residue on the solid phase, and (iv) cyclization and final purification in solution HPLC, high-field NMR, and biol. activity studies showed that the correct stereochem. of the natural product is that proposed by Rinehart et al., whereas the stereochem. proposed by Scheuer et al. is that of a biol. less active diastereoisomer.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 30 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:755009 HCAPLUS Full-text

DOCUMENT NUMBER: 136:79394

TITLE: Chemical and enzymatic stability of a cyclic

depsipeptide, the novel, marine-derived, anti-

cancer agent kahalalide F

AUTHOR(S): Sparidans, Rolf W.; Stokvis, Ellen; Jimeno, Jose M.;

Lopez-Lazaro, Luis; Schellens, Jan H. M.; Beijnen, Jos

Н.

CORPORATE SOURCE: Faculty of Pharmacy, Department of Biomedical

Analysis, Division of Drug Toxicology, Utrecht

University, Utrecht, 3584 CA, Neth.

SOURCE: Anti-Cancer Drugs (2001), 12(7), 575-582

CODEN: ANTDEV; ISSN: 0959-4973

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 17 Oct 2001

AB Kahalalide F is a cyclic depsipeptide isolated from the Hawaiian mollusk Elysia rufescens. This compound is under present phase I clin. investigation as an anti-tumor drug. The role of possible metabolic reactions of this drug in (pre-)clin. investigations has not yet been explored. The first results for kahalalide F in this field of research are given in this paper. The chemical degradation of kahalalide F was investigated under acid, neutral and alkaline conditions using high-performance liquid chromatog. with UV detection. The half-lives at 80° were 1.1, 20 and 8.6 h at pH 0, 1 and 7, resp. At 26° and pH 11, the half-life was 1.65 h. At pH 7 and 11, only one reaction product of kahalalide F was observed, kahalalide G, the hydrolyzed lactone product of kahalalide F. At pH 0 and 1, addnl. reaction products emerged. Metabolic conversion of kahalalide F was tested in vitro using three

different enzyme systems based on pooled human microsomes, pooled human plasma and uridine 5'-diphosphoglucuronyl transferase, resp. The incubated samples were analyzed using the same chromatog. technique as for the degradation samples. Biotransformations were not observed under these conditions and, therefore, it is concluded that kahalalide F is a metabolically stable drug.

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 31 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:706055 HCAPLUS Full-text

DOCUMENT NUMBER:

136:406817

TITLE:

Compatibility and stability of the investigational

polypeptide marine anticancer agent kahalalide F in

infusion devices

AUTHOR(S):

Nuijen, Bastiaan; Bouma, Marjan; Manada, Consuelo; Jimeno, Jose M.; Lazaro, Luis L.; Bult, Auke; Beijnen,

Jos H.

CORPORATE SOURCE:

Department of Pharmacy and Pharmacology, Slotervaart Hospital/The Netherlands Cancer Institute, Amsterdam,

1066 EC, Neth.

SOURCE:

Investigational New Drugs (2001), 19(4),

273-281

CODEN: INNDDK; ISSN: 0167-6997

PUBLISHER:

Kluwer Academic Publishers

DOCUMENT TYPE:

Journal English

LANGUAGE:

ED Entered STN: 27 Sep 2001

Kahalalide F is a novel marine-derived antitumor agent isolated from the AB marine mollusk Elysia rufescens, an organism living in the seas near Hawaii. The compound has shown highly selective in vitro activity against prostate tumors and phase I trials in patients with androgen independent prostate tumors incorporating a daily times five and weekly schedule have been initiated. Kahalalide F is pharmaceutically formulated as a lyophilized product containing 150  $\mu g$  active substance per dosage unit. Prior to i.v. administration it is reconstituted with a solution composed of Cremophor EL, ethanol absolute and Water for Injection (CEW, 5/5/90% volume/volume/v) with further dilution in 0.9% w/v sodium chloride for infusion. The aim of this study was to investigate the compatibility and stability of kahalalide F with different infusion systems prior to the start of clin. trials with the compound Due to the presence of Cremophor EL in the infusion solution, leaching of diethylhexyl phthalate (DEHP) from polyvinyl chloride infusion containers (PVC, Add-a-Flex) was found. Loss of kahalalide F as a consequence of sorption to contact surfaces was shown with an infusion container composed of low d. polyethylene (LD-PE, Miniflac). We conclude that kahalalide F must be administered in a 3-h infusion in concns. of 0.5  $\mu$ g/mL to 14.7  $\mu$ g/mL using an administration set consisting of a glass container and a low-extrables, DEHP-free extension set. Kahalalide F 150 μg/vial powder for infusion reconstituted with 5/5/90% volume/volume/v CEW is stable in the original container for at least 24 h at room temperature (+20-25°) and ambient light conditions. Infusion solns. stored in glass infusion containers at either room temperature  $(+20-25^{\circ})$ , in the dark) or refrigerated conditions  $(+2-8^{\circ})$ , in the dark) are stable for at least 5 days after preparation

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 32 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:598019 HCAPLUS Full-text

11

DOCUMENT NUMBER:

135:167039

TITLE:

Preparation of kahalalide compounds

INVENTOR(S): Albericio, Fernando; Giralt, Ernest; Jimenez, Jose Carlos; Lopez, Angel; Manzanares, Ignacio; Rodriques,

Ignacio; Royo, Miriam

PATENT ASSIGNEE(S):

Pharma Mar, S.A., Spain; Ruffles, Graham Keith

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT NO.			KIN						LICAT					ATE		
WO	20010589	34				2001				2001-					0010	 209 <	<b>:</b>
WO	20010589	34		A3		2002	0321							_			
	W: AE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	
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										MZ,							
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	520488									2003-: 2001-:						209 <	
	783542									2001-						209 < 209 <	
	2280039					2006				2002-						209 < 209 <	
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	2002PA07					2002				2002-1						300 <b>&lt;</b> 309 <b>&lt;</b>	
	107020			Α		2003		-		2002-				_		321 <	
US	20042147	55		A1		2004				2003-						603 <	
	APPLN.						<b>-</b>			2000-							
										2001-0							
00000														_			

OTHER SOURCE(S): MARPAT 135:167039

Entered STN: 17 Aug 2001

Kahalalide F and kahalalide mimic compds. having useful biol. activity were AB prepared The mimics differ from natural kahalalides in one or more of the following respects: at least one amino acid which is not the same as an amino acid present in the parent compound and at least one methylene group or substituent in the side chain acyl group of the parent compound is addnl. or omitted. Approx. 40 kahalalide analogs, including 5-MeHex-D-Val-Thr-Val-D-Val-D-Pro-Orn-D-allo-Ile-cyclo(D-allo-Thr-D-allo- Ile-D-Val-Phe-Etg-Val) (5-MeHex is 5-methylhexanoyl and Etg is ethylglycine residue), were prepared by the solid phase method and their cytotoxicities (IC50 values) tabulated.

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L10 ANSWER 33 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        2001:593276 HCAPLUS Full-text
                        135:170762
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DOCUMENT NUMBER:

TITLE:

Cytotoxic and antimicrobial activities of Kahalalide F

from Elysia rufescens

Scheuer, Paul J.; Hamann, Mark T.; Gravalos, Dolores INVENTOR(S):

G.

PATENT ASSIGNEE(S): PharmaMar, S.A., Spain

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 6274551	B1	20010814	US 1994-192569	19940203 <	-
US 6011010	A	20000104	US 1997-935073	19970925 <	-
US 39496	E1	20070227	US 2003-642006	20030814 <	-
PRIORITY APPLN. INFO.:			GB 1993-2046	A 19930203 <	-
			US 1994-192569	A1 19940203 <	-

ED Entered STN: 16 Aug 2001

AB Kahalalide F (I) is isolated from a sacoglossan (Elysia rufescens). I may be used in the manufacture of pharmaceutical compns. or in the treatment of tumors or viral conditions. Two hundred sacoglossans (E. rufescens), were collected and extracted 3 times with EtOH. The combined exts. were then chromatographed on silica gel flash chromatog. by using hexane, hexane/EtOAc (1:1), EtOAc, EtOAc/MeOH (1:1), MeOH, MeOH/HOAc (98:2). The depsipeptides were found in the EtOAc/MeOH (1:1) fraction. Repeated RP-HPLC yielded 6 new depsipeptides, out of which I was isolated and its structure was determined

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 34 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:128631 HCAPLUS Full-text

DOCUMENT NUMBER: 132:290934

TITLE: Marine natural products as antituberculosis agents
AUTHOR(S): El Sayed, Khalid A.; Bartyzel, Piotr; Shen, Xiaoyu;
Perry, Tony L.; Zjawiony, Jordan K.; Hamann, Mark T.

CORPORATE SOURCE: Department of Pharmacognosy, NCNPR School of Pharmacy,

The University of Mississippi, MS, 38677, USA

SOURCE: Tetrahedron (2000), 56(7), 949-953

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 25 Feb 2000

In an attempt to characterize addnl. structural classes that could serve as lead antituberculosis agents, 48 structurally diverse marine-derived natural and semisynthetic compds. were examined for in vitro activity against Mycobacterium tuberculosis. Three new classes of compds. including C-19 hydroxy steroids [e.g. litosterol (I)], scalarin sesquiterpenoids [e.g. heteronemin (II)], and tetrabromo spirocyclohexadienylisoxazolines [e.g. 11-hydroxyaerothionin (III)] have been identified as having potential as leads for continued investigations as new antituberculosis agents. New addns. to the established antituberculosis structural classes quinone-methide and peptide are also reported.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 35 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:10614 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 132:59154

TITLE: Kahalalide F or salts of this sacoglossan

peptide in treatment of tumors and

viral infections in mammals

INVENTOR(S): Scheuer, Paul J.; Hamann, Mark T.; Gravalos, Dolores

G.

PATENT ASSIGNEE(S): Pharma Mar, S.A., Spain

SOURCE: U.S., 5 pp., Cont. of U.S. Ser. No. 192,569.

CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. \_\_\_\_ ----------US 6011010 Α 20000104 US 1997-935073 19970925 <--US 6274551 B1 20010814 US 1994-192569 19940203 <--PRIORITY APPLN. INFO.: US 1994-192569 A1 19940203 <--

ED Entered STN: 06 Jan 2000

AB Kahalalide F, a peptide that may be isolated from a sacoglossan (Elysia rufescens), or a pharmaceutically acceptable salt thereof, may be used in the treatment of mammalian tumors or viral infections. Use for treatment of human lung carcinoma, human colon carcinoma, Herpes simplex and Vesicular Stomatitis viral infections in mammals is claimed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 36 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:631977 HCAPLUS Full-text

DOCUMENT NUMBER: 131:337344

TITLE: The absolute stereochemistry of kahalalide F. [Erratum

to document cited in CA131:157974]

AUTHOR(S): Goetz, Gilles; Yoshida, Wesley Y.; Scheuer, Paul J.

CORPORATE SOURCE: Department of Chemistry, University of Hawaii,

Honolulu, HI, 96822, USA

SOURCE: Tetrahedron (1999), 55(40), 11957

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 06 Oct 1999

AB On page vii, in the graphical abstract, L-Pro should read D-Pro.

L10 ANSWER 37 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:392419 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 131:157974

TITLE: The absolute stereochemistry of kahalalide F

AUTHOR(S): Goetz, Gilles; Yoshida, Wesley Y.; Scheuer, Paul J. CORPORATE SOURCE: Dep. Chemistry, Univ. Hawaii, Honolulu, HI, 96822, USA

SOURCE: Tetrahedron (1999), 55(25), 7739-7746

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 28 Jun 1999

AB Kahalalide F(1) is a depsipeptide of 14 residues, five of which form a 19-membered ring. It was isolated from a marine mollusk, Elysia rufescens, and is currently in preclin. trails against lung and colon cancers. It was known from conventional amino acid anal. that five valine and two threonine residues represented D- and L-enantiomers, but their position in the mol. was not

known. After extensive hydrolytic trials, a combination of acid hydrolysis

and hydrazinolysis succeeded in definitive stereochem. assignment.

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 38 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:447351 HCAPLUS Full-text

DOCUMENT NUMBER: 129:228328

TITLE: Kahalalides: Bioactive Peptides from a

Marine Mollusk Elysia rufescens and Its Algal Diet

Bryopsis sp.. [Erratum to document cited in

CA125:190997]

Hamman, Mark T.; Otto, Clifton S.; Scheuer, Paul J.; AUTHOR(S):

Dunbar, D. Chuck

CORPORATE SOURCE: Department of Chemistry, University of Hawaii of

Manoa, Honolulu, HI, 96822, USA

SOURCE: Journal of Organic Chemistry (1998), 63(14),

CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English Entered STN: 20 Jul 1998

On page 6595, the labeled amino acid on the structure of kahalalide F (6) AΒ should read D-Pro rather than L-Pro.

L10 ANSWER 39 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:531764 HCAPLUS Full-text

DOCUMENT NUMBER:

125:190997

Kahalalides: bioactive peptides from a TITLE:

marine mollusk Elysia rufescens and its algal diet

Bryopsis sp.

AUTHOR(S): Hamann, Mark T.; Otto, Clifton S.; Scheuer, Paul J.;

Dunbar, D. Chuck

Department of Chemistry, University of Hawaii of CORPORATE SOURCE:

Manoa, Honolulu, HI, 96822, USA

SOURCE: Journal of Organic Chemistry (1996), 61(19),

6594-6600

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

ED Entered STN: 06 Sep 1996

In addition to the previously reported bioactive kahalalide F, 6 new peptides AΒ are described. Six of these, including kahalalide F, are cyclic depsipeptides, ranging from a C31 tripeptide to a C75 tridecapeptide isolated from a sacoglossan mollusk, E. rufescens. The mollusk feeds on a green alga, Bryopsis sp., which has also been shown to elaborate some of these peptides in smaller yields, in addition to an acyclic analog of F, kahalalide G. The bioassay results of antitumor, antiviral, antimalarial, and OI (activity against AIDS opportunistic infections) tests are reported.

L10 ANSWER 40 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:423809 HCAPLUS Full-text

DOCUMENT NUMBER:

125:131710

TITLE:

The marine environment: A resource for prototype

antimalarial agents

AUTHOR(S): El Sayed, Khalid A.; Dunbar, D. Charles; Goins, D.

Keith; Cordova, Cindy R.; Perry, Tony L.; Wesson,
Keena J.; Sanders, Sharon C.; Janus, Scott A.; Hamann,

Mark T.

CORPORATE SOURCE: Center the Development Natural Products, University

Mississippi, University, MS, 38677, USA Journal of Natural Toxins (1996), 5(2),

261-285

CODEN: JNTOER; ISSN: 1058-8108

PUBLISHER: Alaken
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 18 Jul 1996

SOURCE:

AB In an attempt to characterize addnl. structural classes that could serve as prototype antimalarial agents, 28 structurally diverse marine compds. were examined for in vitro activity against the D6 and W2 clones of Plasmodium falciparum. Several new classes of compds. have been identified as having potential as prototypes for the development of new antimalarial agents.

L10 ANSWER 41 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:58580 HCAPLUS Full-text

DOCUMENT NUMBER: 124:164539

TITLE: The antitumoral compound Kahalalide F acts on cell

lysosomes

AUTHOR(S): Garcia-Rocha, Mar; Bonay, Pedro; Avila, Jesus

CORPORATE SOURCE: 28049-Madrid, Spain

SOURCE: Cancer Letters (Shannon, Ireland) (1996),

99(1), 43-50

CODEN: CALEDQ; ISSN: 0304-3835

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 30 Jan 1996

AB The target for the antitumoral peptidic drug, Kahalalide F, has been studied in cultured cells. In the presence of the compound, the cells became impressively swollen, showing the formation of large vacuoles. The formation of these vacuoles appears to be the consequence of changes in lysosomal membranes. Thus, lysosomes are a target for Kahalalide F action.

L10 ANSWER 42 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1995:130565 HCAPLUS Full-text

DOCUMENT NUMBER: 122:17167

TITLE: Kalahide F as cytotoxic and antiviral and antifungal

compound

INVENTOR(S): Schauer, Paul J.; Hamann, Mark T.; Gravalos, Dolores

G.

PATENT ASSIGNEE(S): Pharma Mar, S.A., Spain SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

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AT	151776·	T	19970515	AT	1994-300780		19940202 <
ES	2102772	Т3	19970801	ES	1994-300780		19940202 <
CA	2114859	A1	19940804	CA	1994-2114859		19940203 <
AU	9454911	A	19940811	ΑU	1994-54911		19940203 <
AU	677258	B2	19970417				
·ZA	9400748	Α	19940929	ZA	1994-748		19940203 <
JP	07070185	Α	19950314	JΡ	1994-43024		19940203 <
JP	3452628	B2	20030929				
PRIORIT	Y APPLN. INFO.:			GB	1993-2046	Α	19930203 <

ED Entered STN: 08 Nov 1994

AB Kalahide F (I) which is isolated from sacoglossan may be used in the treatment of tumors or viral conditions. I was isolated from Elysia rufescens by extraction and silica gel flash chromatog. The antifungal, antiviral and cytotoxicity activity of I is shown.

L10 ANSWER 43 OF 56 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1993:491602 HCAPLUS Full-text

DOCUMENT NUMBER:

119:91602

TITLE:

Kahalalide F: a bioactive depsipeptide from the sacoglossan mollusk Elysia rufescens and the green

alga Bryopsis sp

AUTHOR(S):

SOURCE:

Hamann, Mark T.; Scheuer, Paul J.

CORPORATE SOURCE:

Dep. Chem., Univ. Hawaii, Honolulu, HI, 96822, USA

Journal of the American Chemical Society (1993

), 115(13), 5825-6

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE:

Journal

LANGUAGE:

English

ED Entered STN: 04 Sep 1993

AB Kahalalide F, C75H124N14O16, was isolated from a sacoglossan mollusk Elysia rufescens and its food source, a green alga, Bryopsis. Its structure was determined by spectral detns. and chiral amino acid anal.

L10 ANSWER 44 OF 56 USPATFULL on STN

ACCESSION NUMBER:

PATENT INFORMATION: APPLICATION INFO.:

2007:135061 USPATFULL Full-text

TITLE:

New antitumoral compounds

INVENTOR(S):

Palomera, Fernando Albericio, Barcelona, SPAIN Donis, Ariadna Fernandez, Barcelona, SPAIN Lledo, Ernest Giralt, Barcelona, SPAIN Cantador, Carolina Gracia, Barcelona, SPAIN Rodriguez, Pilar Lopez, Barcelona, SPAIN Colomer, Sonia Varon, Barcelona, SPAIN Marchante, Carmen Cuevas, Madrid, SPAIN

Macia, Angel Lopez, Madrid, SPAIN

Solloso, Andres Francesch, Madrid, SPAIN Garcia, Jose-Carlos Jimenez, Barcelona, SPAIN

Exposito, Miriam Royo, Barcelona, SPAIN

	NUMBER	KIND	DATE	
:	US 2007117743	A1	20070524	
	US 2004-570734	A1	20040909	(10)
	WO 2004-GB3847		20040909	
			20061018	PCT 371 date

NUMBER DATE

PRIORITY INFORMATION: GB 2003-21066 2003

03-21066 20030909 <--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KING & SPALDING, 1185 AVENUE OF THE AMERICAS, NEW YORK,

NY, 10036-4003, US

NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 2871

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New analogues of kahalalide F are provided.

L10 ANSWER 45 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2007:50754 USPATFULL Full-text

TITLE: Kahalalide F and compositions and uses thereof INVENTOR(S): Scheuer, Alice E. D., Honolulu, HI, UNITED STATES

legal representative

Hamann, Mark T., Oxford, MS, UNITED STATES

Gravalos, Dolores G., Madrid, SPAIN

Scheuer, Paul J., United States deceased Scheuer, Paul J., Honolulu, HI, UNITED STATES

PATENT ASSIGNEE(S): PharmaMar, S.A., Madrid, SPAIN (non-U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: GB 1993-2046 19930203

DOCUMENT TYPE: Reissue FILE SEGMENT: GRANTED

FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wessendorf, T. D.

LEGAL REPRESENTATIVE: Morgan & Finnegan, L.L.P., Sonnenfeld, Kenneth H.,

Willis, Michael A.

NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM: 5

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 456

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB (Kalahide) Kahalalide F, of formula I below, may be isolated from a sacoglossan. The compound may be used in the manufacture of pharmaceutical compositions or in the treatment of tumors or viral conditions ##STR1##

L10 ANSWER 46 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2007:36872 USPATFULL Full-text

TITLE: Use of Kahalalide Compounds for the Manufacture of a

Medicament for the Treatment of Psoriasis

INVENTOR(S): Izquierdo Delso, Miguel Angel, Madrid, SPAIN

20061010 PCT 371 date

<--

NUMBER DATE -----

PRIORITY INFORMATION: GB 2003-4367 20030226 <--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KING & SPALDING, 1185 AVENUE OF THE AMERICAS, NEW YORK,

NY, 10036-4003, US

NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 481 LINE COUNT: 481

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Kahalalide compounds, in particular kahalalide F, are of use in a method to

treat a mammal suffering from skin disease with avoiding toxicity and

leading to clinical improvement.

L10 ANSWER 47 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2006:275123 USPATFULL Full-text

TITLE:

New antitumoral compounds
Faircloth, Glynn Thomas, Cambridge, MA, UNITED STATES INVENTOR(S):

Marchante, Maria Del Carmen Cuevas, Madrid, SPAIN

NUMBER KIND DATE PATENT INFORMATION: US 2006234920 A1 20061019 APPLICATION INFO.: US 2003-531533 A1 20031020 (10) WO 2003-US33207 20031020 <---20031020 <--20060425 PCT 371 date

> NUMBER DATE -----

PRIORITY INFORMATION: GB 2003-4367 20030226 <--

DOCUMENT TYPE: .Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MORGAN & FINNEGAN, L.L.P., 3 WORLD FINANCIAL CENTER,

NEW YORK, NY, 10281-2101, US
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 2 EXEMPLARY CLAIM: 1
LINE COUNT: 777

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to new kahalalide antitumoral compounds, in particular to analogues of kahalalide F, useful as antitumoral, antiviral, antifungal agents and in the treatment of psoriasis.

L10 ANSWER 48 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2006:27536 USPATFULL Full-text

TITLE: Novel dosage form

INVENTOR(S): Vaya, Navin, Gujarat, INDIA

> . Karan, Rajesh Singh, Gujarat, INDIA Sadanand, Sunil, Gujarat, INDIA Gupta, Vinod Kumar, Gujarat, INDIA

NUMBER KIND DATE -----PATENT INFORMATION: US 2006024365 A1 20060202 APPLICATION INFO.: US 2005-134633 A1 20050519 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-630446, filed

on 29 Jul 2003, PENDING

	NUMBER	DATE	
PRIORITY INFORMATION:	IN 2002-6992002	20020805	<
	IN 2002-6972002	20020805	< <del></del>
	IN 2003-802003	20030122	<
	IN 2003-822003	20030122	<
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	HEDMAN & COSTIGAN	P.C., 1185 AV	VENUE OF THE AMERICAS,

NEW YORK, NY, 10036, US NUMBER OF CLAIMS: 65 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 3850

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form.

L10 ANSWER 49 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2005:171786 USPATFULL <u>Full-text</u>

TITLE: IAP nucleobase oligomers and oligomeric complexes and

uses thereof

INVENTOR(S): LaCasse, Eric, Ottawa, CANADA

McManus, Daniel, Ottawa, CANADA

	•	NUMBER	KIND	DATE	
PATENT INFORMATION:	US	2005148535	A1	20050707	
APPLICATION INFO.:	US	2004-975974	A1	20041028	(10)

NUMBER DATE

PRIORITY INFORMATION: US 2003-516192P 20031030 (60) <--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA,

02110, US

NUMBER OF CLAIMS: 48 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 15 Drawing Page(s)

LINE COUNT: 3022

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides nucleobase oligomers and oligomer complexes that inhibit expression of an IAP polypeptide, and methods for using them to induce apoptosis in a cell. The nucleobase oligomers and oligomer complexes of the present invention may also be used to form pharmaceutical compositions. The invention also features methods for enhancing apoptosis in a cell by administering a nucleobase oligomer or oligomer complex of the invention in combination with a chemotherapeutic or chemosensitizing agent.

L10 ANSWER 50 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2005:138567 USPATFULL <u>Full-text</u>

TITLE: Methods and reagents for the treatment of proliferative

diseases

INVENTOR(S):

LaCasse, Eric, Ottawa, CANADA McManus, Daniel, Ottawa, CANADA Durkin, Jon P., Montreal, CANADA

NUMBER KIND DATE \_\_\_\_\_\_ US 2005119217 A1 20050602 US 2004-975790 A1 20041028 (10) PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE

-----

PRIORITY INFORMATION: US 2003-516263P 20031030 (60) <--

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA,

02110, US

NUMBER OF CLAIMS: 58 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 34 Drawing Page(s) LINE COUNT: 5896

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention features methods, compositions, and kits for treating a

patient having a proliferative disease.

L10 ANSWER 51 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2005:63515 USPATFULL Full-text

TITLE: Kahalalide compounds for use in cancer

therapy

INVENTOR(S): Jimeno, Jose, Madrid, SPAIN

> Lazaro, Luis Lopez, Madrid, SPAIN Casado, Ana Ruiz, Madrid, SPAIN

Izquierdo, Miguel Angel, Madrid, SPAIN Trigo, Jose Manuel, Malaga, SPAIN

Schellens, Jan, Kockengen, NETHERLANDS

Paz-Ares, Luis, Madrid, SPAIN

NUMBER KIND DATE -----PATENT INFORMATION: US 2005054555 A1 20050310
APPLICATION INFO.: US 2004-492670 A1 20041103 (10) <-WO 2002-GB4735 20021018

NUMBER DATE -----

· <--PRIORITY INFORMATION: US 2001-348449P 20011019 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA,

02110

NUMBER OF CLAIMS: 47 EXEMPLARY CLAIM: 1 LINE COUNT: 850

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Procedures for clinical trials of kahalalide compounds are provided, leading AB to new formulations of kahalalide compounds.

L10 ANSWER 52 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2004:274253 USPATFULL Full-text

TITLE:

INVENTOR(S):

Kahalalide f and related compounds Albericio, Fernando, Barcelona, SPAIN

Giralt, Ernest, Barcelona, SPAIN

Jimenez, Jose Carlos, Barcelona, SPAIN

Lopez, Angel, Barcelona, SPAIN Manzanares, Ignacio, Madrid, SPAIN Rodrigues, Ignacio, Madrid, SPAIN Royo, Miriam, Barcelona, SPAIN

NUMBER KIND DATE

PATENT INFORMATION:

APPLICATION INFO.:

US 2004214755 A1 20041028 US 2003-182881 A1 20030603 (10) WO 2001-GB576 20010209 <--<--

NUMBER DATE -----

PRIORITY INFORMATION:

GB 2000-2952 20000209

DOCUMENT TYPE: FILE SEGMENT:

Utility

APPLICATION

LEGAL REPRESENTATIVE: FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA,

<--

02110

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

10

LINE COUNT:

1 1691

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process is provided for preparing kahalalide F and which leads to other

L10 ANSWER 53 OF 56 USPATFULL on STN

ACCESSION NUMBER:

2004:121167 USPATFULL Full-text

kahalalide mimic compounds having useful biological activity.

TITLE:

INVENTOR(S):

Treatment for inhibiting neoplastic lesions Shanahan-Prendergast, Elizabeth, County Kildare,

IRELAND

NUMBER KIND DATE -----

PATENT INFORMATION: APPLICATION INFO.:

US 2004092583 A1 20040513 US 2004-250535 A1 20040102 (10) <--

WO 2002-IE1 20020102

NUMBER DATE -----

PRIORITY INFORMATION:

IE 2001-20010002 20010102 <--

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: HOFFMANN & BARON, LLP, 6900 JERICHO TURNPIKE, SYOSSET,

NY, 11791

NUMBER OF CLAIMS:

69

EXEMPLARY CLAIM:

1

LINE COUNT:

2329

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention discloses the use of incensole and/or furanogermacrens,

derivatives metabolites and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immunodysregulatory disorders. These compounds can be administered alone or in combination with conventional chemotherapeutic, anti-rival, anti-parasite agents, radiation

and/or surgery.

L10 ANSWER 54 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2004:88919 USPATFULL Full-text

TITLE: Kahalalide f formulation

INVENTOR(S): Faircloth, Glynn Thomas, Avenue Cambridge, MA, UNITED

STATES

Nuyen, Bastian, Amsterdam, NETHERLANDS

Weitman, Steve, San Antonio, TX, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2004067895 A1 20040408
APPLICATION INFO.: US 2003-399571 A1 20031114 (10)
WO 2001-GB4821 20011031 <---<--

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA,

02110

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM: LINE COUNT: 392

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

New formulations and new uses of kahalalide F are provided.

L10 ANSWER 55 OF 56 USPATFULL on STN

ACCESSION NUMBER: 2001:131266 USPATFULL Full-text TITLE: Cytotoxic and antiviral compound

INVENTOR(S): Scheuer, Paul J, Honolulu, HI, United States

Hamann, Mark T, Honolulu, HI, United States

Gravalos, Dolores G., Madrid, Spain

PATENT ASSIGNEE(S): PharmaMar, S.A., Madrid, Spain (non-U.S. corporation)

> NUMBER KIND DATE -----

US 6274551 B1 20010814 US 1994-192569 19940203 (8) PATENT INFORMATION: <--APPLICATION INFO.:

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: MacMillan, Keith D. ASSISTANT EXAMINER: Wessendorf, T. D.

LEGAL REPRESENTATIVE: Linek, Ernest V.Banner & Witcoff, Ltd.

NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM: 1 LINE COUNT: 425

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Kalahide F, of formula I below, may be isolated from a sacoglossan. The compound may be used in the manufacture of pharmaceutical compositions or in

the treatment of tumors or viral conditions. ##STR1##

L10 ANSWER 56 OF 56 USPATFULL on STN

2000:1853 USPATFULL Full-text ACCESSION NUMBER: Cytotoxic and antiviral compound TITLE:

Scheuer, Paul J, Honolulu, HI, United States INVENTOR(S): Hamann, Mark T, Honolulu, HI, United States

Gravalos, Dolores G., Madrid, Spain

PATENT ASSIGNEE(S): Pharma Mar, s.a., Madrid, Spain (non-U.S. corporation)

> KIND NUMBER DATE

-----

PATENT INFORMATION: US 6011010 20000104 <-APPLICATION INFO.: US 1997-935073 19970925 (8) <--

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-192569, filed on 3 Feb

1994

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: MacMillan, Keith D. ASSISTANT EXAMINER: Wessendorf, T. D.

LEGAL REPRESENTATIVE: Linek, Ernest V.Banner & Witcoff, Ltd.

NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 266

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Kalahide F. of formula I below, may be isolated from a secoglossan. The compound may be used in the manufacture of pharmaceutical compositions or in

the treatment of tumors or viral conditions. ##STR1##

## Inventor search history

```
=> d his L7

(FILE 'HCAPLUS, USPATFULL' ENTERED AT 09:17:18 ON 04 SEP 2007)

L7 64 S L5 OR L6

=> d que L7

L5 64 SEA ("FAIRCLOTH GLYNN"/AU OR "FAIRCLOTH GLYNN T"/AU OR "FAIRCLOTH GLYNN T JR"/AU OR "FAIRCLOTH GLYNN THOMAS"/AU)

L6 1 SEA "MARCHANTE MARIA DEL CARMEN CUEVAS"/AU

L7 64 SEA L5 OR L6
```

#### Subsequence search results

=> d L7 1-36 ibib ab

L7 ANSWER 1 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:1043879 HCAPLUS Full-text

DOCUMENT NUMBER: 146:159

TITLE: Development of a liquid chromatography/tandem mass

spectrometry assay for the quantification of PM02734,

a novel antineoplastic agent, in dog plasma

AUTHOR(S): Yin, Jianming; Aviles, Pablo; Lee, William; Ly, Carl;

Guillen, Maria Jose; Munt, Simon; Cuevas, Carmen;

Faircloth, Glynn

CORPORATE SOURCE: PharmaMar USA, Inc., Cambridge, MA, 02139-4616, USA

SOURCE: Rapid Communications in Mass Spectrometry (2006),

20(18), 2735-2740

CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

A rapid and sensitive liquid chromatog./tandem mass spectrometry (LC/MS/MS) assay was developed and validated to quantify a novel antineoplastic agent, PM02734, in dog plasma. The method was validated to demonstrate the specificity, limit of quantification (LOQ), accuracy, and precision of measurements. The calibration range for PM02734 was established using PM02734 stds. from 0.05 to 100 ng/mL in blank plasma. The dominating ions were doubly charged mol. ions [M+2H]2+ at m/z 740.0 instead of singly charged ones at m/z 1478.4. The selected reaction monitoring (SRM), based on the m/z 740.0 $\rightarrow$ 212.2 transition, was specific for PM02734, and that based on the m/z 743.8 $\rightarrow$ 212.2 transition was specific for deuterated PM02734 (the internal standard, IS); no endogenous materials interfered with the anal. of PM02734 and IS from blank plasma. The assay was linear over the concentration range 0.05-100 ng/mL. terms of sensitivity of assay 0.05 ng/mL is a very low LLOQ, especially considering PM02734 is a peptide. The correlation coeffs. for the calibration curves ranged from 0.9990 to 0.9999. The mean intraday and interday accuracies for all calibration stds. (n = 9) ranged from 93 to 111% (≤11% bias) in dog plasma, and the mean interday precision for all calibration stds. was less than 6.4%. The mean intra- and interday assay accuracy for all quality control replicates in dog plasma (n = 9), determined at each QC level throughout the validated runs, ranged from 85-111% ( $\leq$ 15% bias) and from 99-109% ( $\leq$ 9% bias), resp. The mean intra- and interday assay precision was less than 12.1 and 13.3% for all QC levels, resp. The assay has been used to support preclin. pharmacokinetic (PK) and toxicokinetic studies. The results showed that preclin. samples could be monitored for PM02734 up to 168 h after

dosing, which allowed us to identify multiple elimination phases and accurately estimate PK information.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:487280 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

145:369384

TITLE:

Induction of resistance to Aplidin in a human ovarian

cancer cell line related to MDR expression

AUTHOR(S):

Tognon, Gianluca; Bernasconi, Sergio; Celli, Nicola;

Faircloth, Glynn T.; Cuevas, Carmen; Jimeno,

Jose; Erba, Eugenio; D'Incalci, Maurizio

Department of Oncology, Flow Cytometry Unit, Mario

CORPORATE SOURCE:

Negri Institute, Milan, Italy

Cancer Biology & Therapy (2005), 4(12), 1325-1330

SOURCE:

CODEN: CBTAAO; ISSN: 1538-4047

PUBLISHER:

Landes Bioscience Journal

DOCUMENT TYPE: LANGUAGE:

English

Aplidin-resistant IGROV-1/APL cells were derived from the human ovarian cancer IGROV-1 cell line by exposing the cells to increasing concentration of Aplidin for eight months, starting from a concentration of 10 nM to a final concentration of 4 µM. IGROV-1/APL cell line possesses five fold relative resistance to Aplidin. IGROV-1/APL resistant cell line shows the typical MDR phenotype: (1) increased expression of membrane-associated P-glycoprotein, (2) cross-resistance to drugs like etoposide, doxorubicin, vinblastine, vincristine, taxol, colchicine and the novel anticancer drug Yondelis (ET-743). The Pgp inhibitor cyclosporin-A restored the sensitivity of IGROV-1/APL cells to Aplidin by increasing the drug intracellular concentration The resistance to Aplidin was not due to the other proteins, such as LPR-1 and MRP-1, being expressed at the same level in resistant and parental cell line. The finding that cells over-expressing Pgp are resistant to Aplidin was

confirmed in CEM/VLB 100 cells, that was found to be 5-fold resistant to Aplidin compared to the CEM parental cell line.

28

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:319213 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

144:343581

TITLE:

Ecteinascidin compounds as anti-inflammatory agents Allavena, Paola; D'Incalci, Maurizio; Faircloth,

INVENTOR(S):

Glynn Thomas

PATENT ASSIGNEE(S):

Pharma Mar S.A., Sociedad Unipersonal, Spain; Ruffles,

Graham Keith

SOURCE:

PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006035244	<b>A</b> 2	20060406	WO 2005-GB50164	20050928
WO 2006035244	A3	20060831		
WO 2006035244	A9	20070301		
דור או או או או	7.14 7.17	מכו קול וזול י	אם אם חם אם מע	D.C. C.N. C.U.

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GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
             NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
             SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
             YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     AU 2005288696
                          Α1
                                20060406
                                            AU 2005-288696
                                                                    20050928
     CA 2583464
                          Α1
                                20060406
                                            CA 2005-2583464
                                                                    20050928
     EP 1812114
                                            EP 2005-805089
                          A2
                                20070801
                                                                    20050928
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, YU
PRIORITY APPLN. INFO.:
                                            US 2004-614093P
                                                                 Ρ
                                                                    20040928
                                            WO 2005-GB50164
                                                                    20050928
                                                                 W
OTHER SOURCE(S):
                         MARPAT 144:343581
     The anti-inflammatory activity of ecteinascidin compds. was determined
     Ecteinascidin 743 (I) and other ecteinascidin compds. affect viability and
     functions of monocyte/macophages. Examples include noncytotoxic concs. of I
     inhibit in vitro and in vivo macrophage differentiation, I shows selective
     cytotoxic effect on mononuclear phagocytes, I inhibits the production of
     inflammatory cytokines/chemokines, and I was compared with antineoplastic
     agents currently used in ovarian cancer.
     ANSWER 4 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN
L7
ACCESSION NUMBER:
                         2006:203200 HCAPLUS Full-text
DOCUMENT NUMBER:
                         144:425023
TITLE:
                         Quantitative analysis of Variolin analog (PM01218) in
                         mouse and rat plasma by high-performance liquid
                         chromatography/electrospray ionization tandem mass
                         spectrometry
AUTHOR(S):
                         Yin, Jianming; Aviles, Pablo; Ly, Carl; Lee, William;
                         Guillen, Maria Jose; Munt, Simon; Cuevas, Carmen;
                         Faircloth, Glynn
CORPORATE SOURCE:
                         PharmaMar USA Inc., Cambridge, MA, 02139-4616, USA
SOURCE:
                         Journal of Chromatography, B: Analytical Technologies
                         in the Biomedical and Life Sciences (2006), 832(2),
                         268-273
                         CODEN: JCBAAI; ISSN: 1570-0232
PUBLISHER:
                         Elsevier B.V.
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     PM01218 is a novel marine-derived alkaloid and has shown potent growth
     inhibitory activity against several human cancer cell lines. A rapid and
     sensitive high performance liquid chromatog./tandem mass spectrometry (HPLC-
     MS/MS) method was developed and validated to quantify PM01218 in mouse and rat
     plasma. The lower limit of quantitation (LLOQ) was 0.05 ng/mL. The
     calibration curve was linear from 0.05 to 100 ng/mL (R2 > 0.999). The assay
     was specifically based on the multiple reaction monitoring (MRM) transitions
     at m/z 278.4\rightarrow184.2, no endogenous material interfaced with the anal. of
     PM01218 and its internal standard from blank mouse and rat plasma. The mean
     intra- and inter-day assay accuracy remained below 15 and 8%, resp., for all
     calibration stds. and QC samples. The intra- and inter-day assay precision was
```

Page 40

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REFERENCE COUNT:

less than 12.8 and 8.5% for all QC levels, resp. The utility of the assay was demonstrated by pharmacokinetics studies of i.v. (bolus) PM01218 on SD rats.

THERE ARE 11'CITED REFERENCES AVAILABLE FOR THIS

# RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:1321640 HCAPLUS Full-text

DOCUMENT NUMBER: 145:116379

TITLE: Ecteinascidin 743 (ET-743; Yondelis), aplidin, and

kahalide F

AUTHOR(S): Henriquez, Ruben; Faircloth, Glynn; Cuevas,

Carmen

CORPORATE SOURCE: PharmaMar, Madrid, 28770, Spain

SOURCE: Anticancer Agents from Natural Products (2005),

215-240, 2 plates. Editor(s): Cragg, Gordon M.; Kingston, David G. I.; Newman, David J. CRC Press

LLC: Boca Raton, Fla.

CODEN: 69HQQY; ISBN: 0-8493-1863-7

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

A review on the first generation of drugs isolated from marine organisms, i.e., Ecteinascidin 743, Aplidin, and Kahalide F. Topics discussed include their origin, mechanisms of action, chemical synthesis, drug development, and

clin. studies.

AUTHOR(S):

REFERENCE COUNT: 104 THERE ARE 104 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 6 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN 2005:730756 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:278611

TITLE: Combination of trabectedin and irinotecan is highly

> effective in a human rhabdomyosarcoma xenograft Riccardi, Anna; Meco, Daniela; Ubezio, Paolo;

> Mazzarella, Giorgio; Marabese, Mirko; Faircloth,

Glynn T.; Jimeno, Jose; D'Incalci, Maurizio;

Riccardi, Riccardo

Department of Pediatric Oncology, Catholic University, CORPORATE SOURCE:

Rome, Italy

SOURCE: Anti-Cancer Drugs (2005), 16(8), 811-815

> CODEN: ANTDEV; ISSN: 0959-4973 Lippincott Williams & Wilkins

PUBLISHER: DOCUMENT TYPE:

Journal LANGUAGE: English

Our objective was to evaluate in vitro and in vivo the effect of the combination of trabectedin (Yondelis, ET-743) and irinotecan (CPT-11) or its major metabolite SN-38 in a human rhabdomyosarcoma cell line. The schedule trabectedin (1 h) followed by irinotecan or SN-38 (24 h) and the opposite sequence (irinotecan or SN-38 24 h followed by trabectedin 1 h) were analyzed in a rhabdomyosarcoma cell line. In vivo studies were conducted with trabectedin and irinotecan at the doses of 0.2 and 20 mg/kg, resp., simultaneously administered with a q4d + 3 schedule. In vitro studies indicated an overall additive effect [combination index (CI) relatively close to 1.0], with the former schedule slightly superior to the latter (at the IC50 effect levels: CI = 0.89 vs. 1.07). Neither transcription nor expression of DNA topoisomerase I was affected by trabectedin treatment. In vivo the therapeutic results of the combination were certainly more impressive: trabectedin and irinotecan combination caused a strong and long-lasting effect on tumor growth (tumor volume inhibition = 89%, log10 cell kill = 1.6), whereas each drug given as a single agent was only marginally active. The discrepancy between the in vitro and in vivo results suggests possible mechanisms involving host cells, other than tumor cells. The striking effects of the combination observed in vivo could be related to a combination of a

direct cytotoxic and an anti-inflammatory indirect effect. The very marked and long-lasting effect of the trabectedin and irinotecan combination in vivo suggests a basis for a clin. evaluation in pediatric patients with rhabdomyosarcoma.

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:218200 HCAPLUS Full-text

DOCUMENT NUMBER: 142:

142:430441

TITLE:

Development of a liquid chromatography/tandem mass spectrometry assay for the quantification of PM00104, a novel antineoplastic agent, in mouse, rat, dog, and

human plasma

AUTHOR(S):

SOURCE:

Yin, Jianming; Aviles, Pablo; Lee, William; Ly, Carl; Guillen, Maria Jose; Munt, Simon; Cuevas, Carmen;

Faircloth, Glynn

CORPORATE SOURCE:

PharmaMar USA, Inc., Cambridge, MA, 02139-4616, USA Rapid Communications in Mass Spectrometry (2005),

19(5), 689-695

CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

A rapid and sensitive liquid chromatog./tandem mass spectrometry (LC/MS/MS) AB assay was developed and validated to quantify a novel antineoplastic agent, PM00104, in mouse, rat, dog, and human plasma. The method was validated to demonstrate the specificity, limit of quantification (LOQ), accuracy, and precision of measurements. The calibration range for PM00104 was established using PM00104 stds. from 0.01-5.0 ng/mL in blank plasma. The selected reaction monitoring (SRM), based on the m/z 692.2  $\rightarrow$  218.2 transition, was specific for PM00104, and that based on the m/z 697.2  $\rightarrow$  218.2 transition was specific for PM00104 (13C2, 2H3) (the internal standard, IS); no endogenous materials interfered with the anal. of PM00104 and IS from blank plasma. The assay was linear over the concentration range 0.01-5.0  $\mbox{ng/mL}$ . The correlation coeffs. for the calibration curves ranged from 0.9981-0.9999. The mean intraday and inter-day accuracies for all calibration stds. (n = 8) ranged from 97-105% ( $\leq$ 5% bias) in human plasma, and the mean inter-day precision for all calibration stds. was less than 8.5%. The mean intra- and inter-day assay accuracy for all quality control (QC) replicates in human plasma (n = 9), determined at each QC level throughout the validated runs, ranged from 96-112% (≤12% bias) and from 102-105% (≤5% bias), resp. The mean intra- and inter-day assay precision was less than 15.0 and 11.8% for all QC levels, resp. For the QC samples prepared in animal species plasma, the %CV values of the assays ranged from 1.8-8.8% in mouse plasma, from 3.7-13.8% in rat plasma, and from 3.0-7.2% in dog plasma. The assay accuracies ranged from 92-102% (≤8% bias) for all QC levels prepared in mouse plasma; ranged from 93-106% (≤7% bias) in rat plasma; and ranged from 95-114% (≤14% bias) in dog plasma. The assay was used to support preclin. pharmacokinetic and toxicokinetic studies and is currently used to measure PM00104 plasma concns. to support clin. trials.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:817412 HCAPLUS Full-text DOCUMENT NUMBER: 141:307511

TTT.

TITLE: Antitumor spisulosine compounds

INVENTOR(S): Rinehart, Kenneth L.; Warwick, Robert A.; Avila, Jesus; Fregeau Gallagher, Nancy L.; Garcia Gravalos,

Dolores; Faircloth, Glynn T.

PATENT ASSIGNEE(S): Board of Trustees of the University of Illinois, USA

SOURCE: U.S., 23 pp., Cont.-in-part of U.S. 6,107,520.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 6800661	B1	20041005	US 1999-386724		10000031
US 6107520					19990831
	Α	20000822	US 1998-58456		19980410
US 38793	E1	20050906	US 2002-219050		20020814
US 2004147615	A1	20040729	US 2003-693174		20031023
US 2006183806	A9	20060817			•
US 7109244	B2	20060919			
US 2006235082	A1	20061019	US 2006-454406		20060615
PRIORITY APPLN. INFO.:			US 1997-43326P	P	19970415
			US 1997-43599P	P	19970415
			US 1998-58456	A2	19980410
			US 1999-386724	A1	19990831
			US 2003-693174	A3	20031023

AB Investigation of the activity of exts. of the clam Spisula polynyma has led to antitumor long-chain, straight-chain alkane or alkene compds. which have a 2-amino group and a 3-hydroxy group. Isolation and preparation of spisulosine compds. are described.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:780551 HCAPLUS Full-text

DOCUMENT NUMBER:

141:254554

TITLE:

Aplidine for multiple myeloma treatment

INVENTOR(S):

Bertino, Joseph R.; Medina, Daniel; Faircloth,

Glynn Thomas; Mitsiades, Constantine S.

PATENT ASSIGNEE(S):

Dana-Faber Cancer Institute, Inc., USA; Ruffles,

Graham Keith

SOURCE:

PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	CENT	NO.			KIND DATE			APPLICATION NO.					DATE				
						_											
WO	2004	0804	7 <b>7</b>		A1 200409		0923	WO 2004-GB1062						20040312			
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GΕ,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚŻ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
TD, TG																	
AU 2004218883			A 1		2004	0923		AU 2004-218883					20040312				

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CA 2519789
                                 20040923
                          Α1
                                             CA 2004-2519789
                                                                    20040312
     EP 1603584
                          A1
                                 20051214
                                             EP 2004-720081
                                                                    20040312
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
    CN 1761480
                          Α
                                20060419
                                            CN 2004-80006724
                                                                    20040312
     JP 2006519828
                          T
                                20060831
                                             JP 2006-505957
                                                                    20040312
    IN 2005DN03454
                          Α
                                20070817
                                             IN 2005-DN3454
                                                                    20050803
                         A 20060525
A 20051011
A1 20060803
A9 20070628
    MX 2005PA09742
                                             MX 2005-PA9742
                                20060525
                                                                    20050912
     NO 2005004668
                                20051011
                                             NO 2005-4668
                                                                    20051011
     US 2006172926
                                20060803
                                             US 2006-548710
                                                                    20060411
     US 2007149445
PRIORITY APPLN. INFO.:
                                             US 2003-454125P
                                                                 P 20030312
                                             US 2003-520293P
                                                                 P 20031114
                                             WO 2004-GB1062
                                                                 W 20040312
```

AB Aplidine and aplidine analogs are used in the manufacture of a medicament for treating multiple myeloma.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:780508 HCAPLUS Full-text

DOCUMENT NUMBER: 141:271548

TITLE: Improved antitumor treatments using aplidine and

aplidine analogs in combination with other drugs

INVENTOR(S): Barnejee, Debabrata; Bertino, Joseph R.;

Faircloth, Glynn Thomas; Guray, Saydam;

Jimeno, Jose

PATENT ASSIGNEE(S): Pharma Mar S.A., Spain SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
	2004						2004								20040312		
WO	2004	0804	21		A3 20050609												
	W:	ΑE,	AG,	AL,	ΑM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
							ID,										
							LV,										
							PL,										
							TZ,										
	RW:						MW,										
							ТJ,										
							HU,										
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		TD,		,	,	,	,	02,	J,	J,	0,	O 2 /	J.,	,	,	,	011,
AU	2004				A 1		2004	0923		AII 2	004-	2204	51		2	0040	312
	2516				A1		2004									0040	
	1620				A2		2006									0040	
							ES,										
							TR,							иш,	<b>Э</b> Б,	MC,	ш,
CN	1753		51,	,	A	01,	2006				004-	-			2	0040	212
	2006		4.8		T		2006				004-					0040	
							2005										
	NO 2005003947 US 2006178298															0050	
	RIORITY APPLN. INFO.:						2006	0010								0051	
LUIOUII	1 APP	ייאורד	TIALO	• •						US 2	003-	4541.	20P	J	2	0030:	3 I Z

 $$\tt WO~2004-US7606~\tt W~20040312~\tt Aplidine~and~aplidine~analogs~are~of~use~for~the~treatment~of~cancer,~in~particular~in~the~treatment~of~leukemias~and~lymphomas,~especially~in~\tt the~treatment~of~leukemias~and~lymphomas,~especially~in~\tt the~treatment~of~leukemias~and~lymphomas,~especially~in~\tt the~treatment~of~leukemias~and~lymphomas,~especially~in~\tt the~treatment~of~leukemias~and~lymphomas,~especially~in~\tt the~treatment~of~leukemias~and~lymphomas,~especially~in~\tt the~treatment~of~leukemias~and~lymphomas~analogs$ 

combination therapies.

L7 ANSWER 11 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:354967 HCAPLUS Full-text

DOCUMENT NUMBER: 140:357671

TITLE: Preparation of kahalalide antitumoral compounds

INVENTOR(S):
Faircloth, Glynn Thomas; Elices, Mariano;

Sasak, Halina; Aviles Marin, Pablo Manuel; Cuevas

Marchante, Maria Del Carmen

PATENT ASSIGNEE(S): Pharma Mar, S.A.U., Spain SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

AΒ

PATENT NO.					KIN	D -	DATE		APPLICATION NO.						DATE		
WO	2004	0356	13		A2		2004	0429		WO 2	003-	US33	207		20031020		
WO	2004	0356	13		A3 2004072												
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
								DM,									
								IN,									
								MD,									
								RU,									
								US,									
	RW:							SD,								AZ.	BY.
								AT,									
								IT,									
								GA,					•	•	•	•	•
WO	2003			•	A1		2003			WO 2				,		0021	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,						BZ,			
								DM,									
								IS,									
								MG,									
								SG,									
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	•	•		·	·	•
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
								AT,									
								LU,									
		CG,	CI,	CM,	GA,	GN,	ĠQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	·	•	•
CA	2501				A1		2004			CA 2					2	0031	020
ΑU	2003	2859	11		, A1		2004	0504		AU 2	003-	2859	11		2	0031	020
	2003		89		Α		2005	0823		BR 2	003-	1548	9		2	0031	020
ΕP	1572	726			A2		2005	0914		EP 2	003-	7791	40		2	0031	020
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
JP	2006	5171	95		T		2006	0720		JP 2	005-	5014	83		21	0031	020
	2005				Α		2005			MX 2	005-	PA41	33		2	0050	418
	2005		79		Δ		2005			NO 2					2	0050	513
US 2006234920					A1		2006	1019		US 2					20	0060	425
IORITY APPLN. INFO.:				.:						WO 2	002-0	GB47	35	1	A 20	0021	018
										GB 2				1	A 20030226		
									GB 2						0030	624	
										US 2	001-	3484	49P	]	2 (	0011	019

WO 2001-GB4821 A 20011031 GB 2002-22409 A 20020926 WO 2003-US33207 W 20031020

AB The invention is directed to new kahalalide antitumoral compds., in particular to analogs of kahalalide F, which are useful as antitumoral, antiviral and antifungal agents and in the treatment of psoriasis. Thus, kahalalide F analogs in which the 5-methylhexanoc acid residue has been replaced by (S)-and (R)-4-methylhexanoic acid were prepared and assayed for cytotoxic activity against various cell lines.

L7 ANSWER 12 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:869631 HCAPLUS Full-text

DOCUMENT NUMBER:

140:210099

TITLE:

Use of CFU-GM assay for prediction of human maximum

tolerated dose of a new antitumoral drug: Yondelis

(ET-743)

AUTHOR(S):

Gomez, Susana G.; Bueren, Juan A.; Faircloth,

Glynn; Albella, Beatriz

CORPORATE SOURCE:

S.A. Poligono Industrial La Mina, PharmaMar, Madrid,

28770, Spain

SOURCE:

Toxicology in Vitro (2003), 17(5/6), 671-674

CODEN: TIVIEQ; ISSN: 0887-2333

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

AB Acute cytotoxic exposure causes decreases in bone marrow progenitors that precedes the neutrophil nadir. Expts. in animal models reveal a relationship between the reduction in granulocyte-macrophage progenitors (CFU-GM) and the decrease in absolute neutrophil count [Toxicol. Pathol. 21 (1993) 241]. Recently, the prevalidation of a model for predicting acute neutropenia by the CFU-GM assay has been reported [Toxicol. In Vitro 15 (2001) 729]. The model was based on prediction of human MTD by adjusting the animal-derived MTD for the differential sensitivity between CFU-GM from animal species and humans. In this study, this model has been applied on a new antitumoral drug, Yondelis (Ecteinascidin; ET-743). Preclin. studies showed that hematotoxicity was the main side effect in mice, being the MTD of 600  $\mu g/m2$  [Drugs Future 21 (1996) 1155]. The sensitivity of myeloid progenitors was higher in mice than in humans, with IC90 values of  $0.69\pm0.22$  nM and  $1.31\pm0.21$  nM for murine and human CFU-GMs resp. This study predicts a human MTD of 1145 µg/m2. The reported human MTD of ET-743 given as a 24-h continuous infusion every 3 wk is 1800  $\mu$ g/m2 [J. Clin. Oncol. 19 (2001) 1256]. Since our predicted MTD is within fourfold of the actual MTD (the interspecies variation in tolerated dose due to differences in clearance rates, metabolism pathways and infusion rate) the result confirms the profit of the prediction model.

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:848751 HCAPLUS Full-text

DOCUMENT NUMBER:

140:385585

TITLE:

In vitro toxicity of three new antitumoral drugs

(trabectedin, aplidin, and kahalalide F) on hematopoietic progenitors and stem cells

AUTHOR(S):

Gomez, Susana G.; Bueren, Juan A.; Faircloth,

Glynn T.; Jimeno, Jose; Albella, Beatriz

CORPORATE SOURCE:

PharmaMar, Madrid, Spain

SOURCE:

Experimental Hematology (New York, NY, United States)

(2003), 31(11), 1104-1111

CODEN: EXHMA6; ISSN: 0301-472X

PUBLISHER:

Elsevier Science Inc.

DOCUMENT TYPE:

Journal LANGUAGE: English AR

Objective: In addition to neutropenias and/or thrombocytopenias as a shortterm effect, antineoplastics also can produce long-term effects as a consequence of damage to the hematopoietic stem cells. The aim of the present study was to evaluate the toxicity of three marine-derived antineoplastics on murine hematopoietic stem cells. These antitumoral compds. currently are being evaluated in patients in phase II (aplidin and kahalalide F) and phase II/III (trabectedin) clin. trials. Materials and methods: Long-term competitive repopulating assays were performed in mice to analyze toxic effects on the hematopoietic stem cells responsible for the multipotential long-term repopulation of hematopoiesis. Furthermore, granulocytic and T- and B-lymphoid lineages were studied, as well as myeloid (CFU-GM) and megakaryocytic (CFU-Meg) progenitors. Results: When cells were treated in vitro for 24 h with CFU-GM IC50 dose of trabectedin (9.59 ± 4.96 nM), no significant effects were observed in the stem cells. The dose of trabectedin that produced 90% of inhibition in CFU-GM (IC90: 23.71 ± 1.27 nM) only inhibited 45% survival of stem cells. Doses of aplidin that produced redns. of 50% (56.9  $\pm$  13.32 nM) or 90% (195.88  $\pm$  21.39 nM) in myeloid progenitors did not show any effect on hematopoietic stem cells. Kahalalide F did not show any toxic effect in either short-term or long-term repopulating cells up to 10  $\mu M$ . Conclusions. Our data show that the hematopoietic stem cells effects of antitumoral drugs can be properly characterized by the murine competitive repopulating assays. Our results suggest that long-term myelosuppression as a consequence of trabectedin, aplidin, or kahalalide F treatment would not be expected.

REFERENCE COUNT:

THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS 51 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:638934 HCAPLUS Full-text

DOCUMENT NUMBER:

140:283822

TITLE:

Development of a liquid chromatography/tandem mass spectrometry assay for the quantification of Aplidin, a novel marine-derived antineoplastic agent, in human

plasma

AUTHOR(S):

Yin, Jianming; Aviles, Pablo; Lee, William; Ly, Carl;

Floriano, Pablo; Ignacio, Manzanares; Faircloth,

CORPORATE SOURCE:

SOURCE:

PharmaMar USA, Inc., Cambridge, MA, 02139-4616, USA Rapid Communications in Mass Spectrometry (2003),

17(16), 1909-1914

CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

A rapid and sensitive liquid chromatog./tandem mass spectrometry (LC/MS/MS) AB assay was developed and validated to quantify a novel marine-derived depsipeptide, Aplidin, in human plasma. The method was validated to demonstrate the specificity, recovery, limit of quantitation (LOQ), accuracy, and precision of measurements. The calibration range for Aplidin was established using Aplidin stds. from 0.05-50 ng/mL in blank human plasma. The multiple reaction monitoring, based on the transition m/z 1110.7 $\rightarrow$ 295.3, was specific for Aplidin, and that based on the transition m/z 1112.6 $\rightarrow$ 297.3 was specific for didemnin B (the internal standard); no endogenous materials interfered with the anal. of Aplidin and didemnin B from blank human plasma. The assay was linear over the concentration range 0.05-50.0 ng/mL.

correlation coeffs. for the calibration curves ranged from 0.9979 to 0.9999. The mean intra- and interday accuracies for all calibration stds. (n = 12) ranged from 97 to 106% ( $\leq$ 6% bias), and the mean interday precision for all calibration stds. was less than 8.3%. The mean intra- and interday assay accuracy for all quality control replicates (n = 12), determined at each QC level throughout the validated runs, remained below 12 and 7%, resp. The mean intra- and interday assay precision was less than 13.1 and 10.7% for all QC levels, resp. The assay is currently used to measure Aplidin plasma concns. to support clin. trials.

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:584509 HCAPLUS Full-text

DOCUMENT NUMBER:

139:332249

TITLE:

Validation of a sensitive assay for thiocoraline in mouse plasma using liquid chromatography-tandem mass

spectrometry

AUTHOR(S):

Yin, Jianming; Aviles, Pablo; Lee, William; Ly, Carl;

Guillen, Maria Jose; Calvo, Pilar; Manzanares,

Ignacio; Faircloth, Glynn

CORPORATE SOURCE:

SOURCE:

PharmaMar USA, Inc., Cambridge, MA, 02139-4616, USA Journal of Chromatography, B: Analytical Technologies in the Biomedical and Life Sciences (2003), 794(1),

89-98

CODEN: JCBAAI; ISSN: 1570-0232

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: English

AB A sensitive HPLC-tandem mass spectrometry assay for thiocoraline, an antitumor depsipeptide, in mouse plasma is described. Echinomycin, a quinoxaline peptide, was used as an internal standard Thiocoraline was recovered from the mouse plasma using protein precipitation with MeCN and followed by solid-phase extraction of the supernatant. The mobile phase consisted of MeOH (0.1% formic acid)-H2O (0.1% formic acid) (90:10, volume/volume). The anal. column was a YMC C18. The standard curve was linear from 0.1 to 50 ng/mL (R2>0.99). The lower limit of quantitation was 0.1 ng/mL. The assay was specific based on the multiple reaction monitoring transitions at m/z  $1157 \rightarrow 215$  and m/z 1101  $\rightarrow$  243 for thiocoraline and the internal standard, echinomycin, resp. The mean intra- and inter-day assay accuracies remained <5 and 12%, resp., for all calibration stds. and quality control (QC) samples. The intra- and inter-day assay precisions were <11.4 and 9.5% for all QC levels, resp. The utility of the assay was demonstrated by a pharmacokinetic study of i.v. (bolus) thiocoraline on CD-1 mice. Thiocoraline was stable in mouse plasma in an icewater bath for 6 h and for three freeze-thaw cycles. The reconstituted thiocoraline after extraction and drying sample process was stable in the autosampler for over 24 h. The assay was able to quantify thiocoraline in plasma up to 48 h following dose. Pharmacokinetic anal. showed that thiocoraline has distinct pharmacokinetic profiling when dosed in different formulation solns. The assay is currently used to measure thiocoraline plasma concns. in support of a project to develop a suitable formulation with a desirable pharmacokinetic profile.

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:548630 HCAPLUS Full-text

11

DOCUMENT NUMBER:

140:174525

TITLE: Effective combination of ET-743 and doxorubicin in

sarcoma: preclinical studies

AUTHOR(S): Meco, Daniela; Colombo, Tina; Ubezio, Paolo;

Zucchetti, Massimo; Zaffaroni, Marco; Riccardi, Anna;

Faircloth, Glynn; Jose, Jimeno; D'Incalci,

Maurizio; Riccardi, Riccardo

CORPORATE SOURCE: Division of Pediatric Oncology, Catholic University of

Rome, Rome, Italy

SOURCE: Cancer Chemotherapy and Pharmacology (2003), 52(2),

131-138

CODEN: CCPHDZ; ISSN: 0344-5704

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

AΒ The purpose of this study was to investigate the cytotoxic and antitumor effects of the combination of the novel anticancer drug ET-743 and doxorubicin (Dx) and to determine whether any pharmacokinetic interaction occurs in sarcoma-bearing mice. The cytotoxicity of each drug and of their combinations was assessed in the rhabdomyosarcoma cell line TE-671 by a clonogenic assay, and isobologram anal. was performed to detect any synergistic, additive or antagonistic effects. The antitumor activities of each drug and of the combinations were also evaluated in nude mice transplanted s.c. with human TE-671 rhabdomyosarcoma and in C3H female mice injected i.v. with UV2237 M fibrosarcoma or with the Dx-resistant subline UV2237 M-ADM which overexpresses Pgp. Antitumor activity was evaluated by monitoring the TE-671 tumor volume over time and, in the case of the murine fibrosarcomas, by evaluation of lung deposits at autopsy quantified by determining lung weight Pharmacokinetic studies were performed in TE-671-bearing mice. ET-743 was determined in plasma by an HPLC-MS method and Dx in plasma and tissue by an HPLC method with fluorescence detection. The combination of ET-743 and Dx was found to be additive with the average combination index slightly lower than 1 at all survival levels, suggesting weak synergism. In TE-671 tumors in vivo the activity of ET-743 or Dx given alone was marginal, whereas the combination produced a significant antitumor effect. The log cell kill (LCK) values were 0.13 and 0.33 for ET-743 and Dx alone, whereas they ranged from 0.85 to 1.12for the combination. Giving ET-743 1 h before Dx slightly enhanced the effect (LCK 1.12) compared with giving the drugs simultaneously (LCK 0.85) or in the opposite sequence (LCK 0.92). In UV2237 M fibrosarcoma, both Dx and ET-743 showed an effect in reducing the weight of lung metastases, although the combination of the two drugs was not superior to each drug alone. In UV2237 M-ADM tumors neither of the two drugs was active, whereas the combination, particularly when the two drugs were given simultaneously, produced a significant effect. Plasma levels of ET-743 and Dx were not significantly different when the drugs were given alone or in combination. The concns. of Dx in tissues including tumor, liver, heart and kidney were found to be the same whether the drug was given alone or in combination with ET-743. These results indicate that ET-743 and Dx in combination produce an additive effect against human sarcoma cells, reinforcing the idea that they act by a different mechanism of action. In mice no pharmacokinetic interaction between the two drugs was found. The observed activity in UV2237 M-ADM and in human TE-671 sarcoma suggests that the combination of the two drugs could be effective for tumors displaying low sensitivity to each drug given alone. Based on these findings a phase I study on the combination of the two drugs was recently initiated.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:196182 HCAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 139:285666

TITLE: Antiangiogenesis Treatment Combined with Chemotherapy

Produces Chondrosarcoma Necrosis

AUTHOR(S): Morioka, Hideo; Weissbach, Lawrence; Vogel, Tikva;

Nielsen, G. Petur; Faircloth, Glynn T.;

Shao, Li; Hornicek, Francis J.

CORPORATE SOURCE: Orthopedic Research Laboratories, Harvard Medical

School, Boston, MA, 02114, USA

SOURCE: Clinical Cancer Research (2003), 9(3), 1211-1217

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal LANGUAGE: English

A combination therapy protocol using a marine chemotherapeutic and antiangiogenic mol. was tested in a mouse tumor xenograft model for the ability to curtail the growth of a human chondrosarcoma (CHSA). Ecteinascidin-743 (ET-743), a marine-derived chemotherapeutic, was effective at slowing the growth of a primary CHSA. Plasminogen-related protein B, which antagonizes various endothelial cell activities, also elicited a significant inhibition of neoplastic growth, albeit with reduced effectiveness. The combination of the two agents resulted in only a modest further repression of tumor growth over that associated with ET-743 treatment alone, as measured by tumor volume (82% vs. 76% inhibition, resp.). However, anal. of the extent of tumor necrosis and vascularization of the tumor revealed that the coadministration of the two compds. was clearly more effective, eliciting a 2.5-fold increase in tumor necrosis relative to single-agent treatment. The combination therapy also was most effective at antagonizing tumor-associated microvessel formation, as assessed by CD31 immunostaining, suggesting that combination therapy may hold promise for treating CHSA. Tumor necrosis produced by combination therapy of ET-743 and recombinant plasminogen-related protein B was also significantly greater than that produced by conventional doxorubicin treatment, further corroborating the efficacy of combination therapy.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:974072 HCAPLUS Full-text

DOCUMENT NUMBER: 139:127523

TITLE: Effectiveness of ecteinascidin-743 against

drug-sensitive and -resistant bone tumor cells

AUTHOR(S): Scotlandi, Katia; Perdichizzi, Stefania; Manara, Maria

Cristina; Serra, Massimo; Benini, Stefania; Cerisano,

Vanessa; Strammiello, Rosaria; Mercuri, Mario; Reverter-Branchat, Gemma; Faircloth, Glynn;

D'Incalci, Maurizio; Picci, Piero

CORPORATE SOURCE: Laboratorio di Ricerca Oncologica, Istituti Ortopedici

Rizzoli, Bologna, 40136, Italy

SOURCE: Clinical Cancer Research (2002), 8(12), 3893-3903

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal LANGUAGE: English

The identification of new drugs is strongly needed for bone tumors. Ecteinascidin-743 (ET-743), a highly promising antitumor agent isolated from the marine tunicate Ecteinascidia turbinata, is currently under Phase II clin. investigation in Europe and the United States for treatment of soft tissue sarcoma. In this study, we analyzed the preclin. effectiveness of this drug in osteosarcoma and Ewing's sarcoma. The effects of ET-743 were evaluated against a panel of human osteosarcoma and Ewing's sarcoma cell lines characterized by different drug responsiveness and compared with the effects of standard anticancer agents. In addition, combination treatments with ET-743 and the other standard chemotherapy agents for sarcoma were analyzed to

highlight the best drug-to-drug interaction. A potent activity of ET-743 was clearly observed against both drug-sensitive and drug-resistant (multidrugresistant, methotrexate- and cisplatin-resistant) bone tumor cells at concns. that are easily achievable in patients (pM to nM range). Ewing's sarcoma cells appeared to be particularly sensitive to the effects of this drug. The anal. of the effects of ET-743 on cell cycle, apoptosis, and differentiation indicated that both osteosarcoma and Ewing's sarcoma cells had a slower progression through the different phases of the cell cycle after treatment with ET-743. However, the drug was able to induce a massive apoptosis in Ewing's sarcoma but not in osteosarcoma cells. In the latter neoplasm, ET-743 showed a differential effect, as indicated by the significant increase in the expression and activity of alkaline phosphatase, a marker of osteoblastic differentiation. Concurrent exposure of cells to ET-743 and other chemotherapeutic agents resulted in greater than additive interactions when doxorubicin and cisplatin were used, whereas subadditive effects were observed with methotrexate, vincristine, and actinomycin D. Overall, these results encourage the inclusion of this drug in the treatment of patients with bone tumors, although a careful design of new regimens is required to identify the best therapeutic conditions.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:742571 HCAPLUS Full-text

DOCUMENT NUMBER: 139:62716

TITLE: Preclinical toxicity studies of kahalalide F, a new

anticancer agent: single and multiple dosing regimens

in the rat

AUTHOR(S): Brown, Alan P.; Morrissey, Robert L.; Faircloth,

Glynn T.; Levine, Barry S.

CORPORATE SOURCE: Toxicology Research Laboratory, University of Illinois

at Chicago, Chicago, IL, 60612, USA

SOURCE: Cancer Chemotherapy and Pharmacology (2002), 50(4),

333-340

CODEN: CCPHDZ; ISSN: 0344-5704

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

Kahalalide F (KF) is a new anticancer agent currently in clin. trials for AΒ solid tumors, including prostate cancer. During the preclin. development of this drug, the studies reported here were conducted to determine the acute and multiple dose toxicities of KF when administered i.v. to rats. This dosing route is the intended route of clin. administration. KF was administered i.v. to male and female CD rats using single- and multiple-dose (daily for 5 days) schedules. Animals were observed for clin. signs, and body weight, hematol., and clin. chemical parameters determined Animals were necropsied, gross observations and organ wts. recorded, and numerous tissues were collected and examined microscopically. KF produced lethality at 375 and 450  $\mu g/kg$  in males and females, resp., and the maximum tolerated dose (MTD) was estimated to be 300  $\mu g/kg$  (1800  $\mu g/m2$ ). The nervous system appeared to be a potential site of action for the production of lethality. Single-dose administration of KF at 150 and 300  $\mu$ g/kg produced organ toxicity in which the kidney was the primary target. Injury to distal convoluted tubules was the most toxicol. significant lesion, and was observed on day 4. However, by day 29, resolution of renal toxicity had occurred in the 150-µg/kg group, but only partial resolution was seen at 300 µg/kg. Renal injury correlated with increased serum creatinine, BUN, and kidney wts. at 300  $\mu g/kg$ , indicating impairment of renal function. Subacute, necrotizing inflammation of bone marrow and peritrabecular osteocyte hyperplasia of bone were seen at 300  $\mu g/kg$  on day 4, with recovery thereafter.

Injury to blood vessels and surrounding tissue at the injection site were produced by KF, likely due to local cytotoxicity. In general, reversibility of toxicity was seen at 150  $\mu g/kg$  but not at 300  $\mu g/kg$ . When KF was administered once daily for five consecutive days at a dose of 80  $\mu g/kg$  per day (400  $\mu g/kg$  total dose), slightly decreased body weight gain was the primary drug-related effect. Therefore, the no-adverse-effect dose was at or near 80  $\mu g/kg$  per day (480  $\mu g/m2$  per day). These findings demonstrate that fractionation of a lethal or MTD dose of KF by daily administration for 5 days reduces drug-induced toxicity, and appears to be a viable option for the clin. evaluation of KF for the treatment of cancer.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:526235 HCAPLUS Full-text

DOCUMENT NUMBER: 138:100185

TITLE: Unique features of the mode of action of ET-743

AUTHOR(S): D'Incalci, Maurizio; Erba, Eugenio; Damia, Giovanna;

Galliera, Emanuela; Carrassa, Laura; Marchini, Sergio;

Mantovani, Roberto; Tognon, Gianluca; Fruscio, Robert;

Jimeno, Jose; Faircloth, Glynn T.

CORPORATE SOURCE: Department of Oncology, Istituto di Ricerche

Farmacologiche "Mario Negri,", Milan, 20157, Italy

SOURCE: Oncologist (2002), 7(3), 210-216

CODEN: OCOLF6; ISSN: 1083-7159

PUBLISHER: AlphaMed Press

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review of the current knowledge of the primary mode of action of a natural product, ecteinascidin 743 (ET-743), derived from the marine tunicate Ecteinascidia turbinata. ET-743 was initially selected for preclin. development because of its potent antitumor activity observed against several human solid tumor types. In vitro, the drug is cytotoxic in the nanomolar range, and in the case of some very sensitive cell lines, in the picomolar range. The large potency differences observed among several solid tumor types indicate that this compound possesses some tumor selectivity, but the mol. basis of these differential effects remains to be elucidated. The the mechanism of action of ET-743 is evaluated in this context. The available information on ET-743 binding to DNA and its effects on transcriptional regulation point to a unique behavior of this drug, as it independently affects specific gene transcription in a promoter-dependent way. In addition, ET-743 shows a peculiar pattern of selectivity in cells with different defects in their DNA-repair pathways. These results highlight a unique property of ET-743, possibly explaining why it possesses antitumor activity against tumors that are refractory to standard anticancer drugs, all of which certainly act by mechanisms that are different from that of ET-743.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:353299 HCAPLUS Full-text

DOCUMENT NUMBER: 136:359641

TITLE: Kahalalide F formulations for antitumor use INVENTOR(S): Ruffles, Graham Keith; Faircloth, Glynn Thomas

; Nuyen, Bastian; Weitman, Steve

PATENT ASSIGNEE(S): Pharma Mar, S.A., Spain SOURCE: PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_ ---------------WO 2002036145 A2 20020510 WO 2001-GB4821 20011031 WO 2002036145 А3 20021017 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20020510 CA 2425627 A1 CA 2001-2425627 20011031 AU 200210749 Α 20020515 AU 2002-10749 20011031 EP 1330258 20030730 EP 2001-978654 A2 20011031 EP 1330258 В1 20051228 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR BR 2001014912 20031014 Α BR 2001-14912 20011031 Т JP 2004512370 20040422 JP 2002-538956 20011031 A A T A2 T3 CN 1568192 20050119 CN 2001-818271 20011031 NZ 525243 20050128 NZ 2001-525243 20011031 AT 314084 20060115 AT 2001-978654 20011031 HU 200600031 20060529 HU 2006-31 20011031 ES 2256305 20060716 ES 2001-1978654 20011031 RU 2292216 C2 20070127 RU 2003-116124 20011031 CA 2462639 A1 20030424 CA 2002-2462639 20021018 WO 2003033012 A1 20030424 WO 2002-GB4735 20021018 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2002334203 A1 20030428 AU 2002-334203 20021018 EP 2002-801430 EP 1435990 20040714 Α1 20021018 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK ZA 2003-3136 ZA 2003003136 20040723 Α 20030423 Α NO 2003001860 20030630 NO 2003-1860 20030425 MX 2003PA03704 Α 20040504 MX 2003-PA3704 20030425 A1 A1 HK 1054192 20060908 HK 2003-106441 20030910 US 2004067895 20040408 US 2003-399571 20031114 P 20001031 P 20001106 P 20011019 W 20011031 A 20020926 W 20021018 US 2000-244471P PRIORITY APPLN. INFO.: US 2000-246229P US 2001-348449P WO 2001-GB4821 GB 2002-22409 WO 2002-GB4735

AB New formulations and new uses of kahalalide F are provided for antitumor application against neuroblastomas or dedifferentiated or mesenchymal chondrosarcomas or osteosarcomas.

L7 ANSWER 22 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:817226 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 135:362533

TITLE: Immunosuppressive sesbanimide compositions INVENTOR(S): Faircloth, Glynn T.; Millan, Francisco

Romero; Fernandez, Librada Maria Canedo; Sarabia,

Cristina Accbal

PATENT ASSIGNEE(S): Pharma Mar, S.A., Spain

Fraient Assignme(s): Finalma Mat, S.A., Spain

SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont. of U.S. Ser. No.

53,485, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001039041	A1	20011108	US 2001-756244	20010108
PRIORITY APPLN. INFO.:			US 1995-479695 B1	. 19950607
			US 1998-53485 B1	. 19980401

The active component of the pharmaceutical composition of the present AΒ invention is a compound which has been isolated from the controlled aerobic fermentation of a marine microorganism, Agrobacterium sp. The pharmaceutical compns. of the present invention, useful for postsurgical graft tolerance, are thus directed to compns. comprising a pharmaceutical carrier, diluent or excipient, and an effective amount of sesbanimide, which is an alkaloid that has been previously been isolated from seeds and reported to be useful as an antitumor drug. Prior to the present invention however, this compound had not been isolated from any fermentation broth nor had it been determined to have immunomodulatory activity. The crude residue of fermented Agrobacterium species was dissolved in H2O-MeOH (1:1). The water/alc. fraction was extracted twice with CH2Cl2 and twice with EtOAc. The organic solvent-soluble components were concentrated yielding active organic exts. The organic extract was chromatographed on silica gel by an MPLC system using a mixture of hexane/EtOAc as the eluting solvent. The immunosuppressive and antitumor activities were detected in some of the fractions.

L7 ANSWER 23 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:750175 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 136:395455

TITLE: Sensitivity of soft tissue sarcoma cell lines to

chemotherapeutic agents: identification of ecteinascidin-743 as a potent cytotoxic agent Li, Wei Wei; Takahashi, Naoto; Jhanwar, Suresh;

AUTHOR(S): Li, Wei Wei; Takahashi, Naoto; Jhanwar, Suresh; Cordon-Cardo, Carlos; Elisseyeff, Yaroslav; Jimeno,

Jose; Faircloth, Glynn; Bertino, Joseph R.

CORPORATE SOURCE: Laboratories of Molecular Pharmacology, Memorial

Sloan-Kettering Cancer Center, New York, NY, 10021,

USA

SOURCE: Clinical Cancer Research (2001), 7(9), 2908-2911

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE:

English

The cytotoxic effects of ecteinascidin-743(ET-743), a novel marine natural AB product, were evaluated and compared with that of clin. used anticancer agents methotrexate, doxorubicin, etoposide, and paclitaxel in eight human soft tissue sarcoma (STS) cell lines. HT-1080, a fibrosarcoma cell line, and HS-42, a malignant mesodermal cell line, were the most sensitive of the cell lines to methotrexate, doxorubicin, etoposide, and paclitaxel. Other cell lines (IC50s) varied considerably and were more resistant to these agents. ET-743 was more potent than any of these agents, with IC50s in the PM range in all of the cell lines. Cytotoxicity of ET-743 was dose- and time-related (4-72 h exposure). Cytotoxic concns. of ET-743 produced a S/G2 block in all of the cell lines tested. Three colon adenocarcinoma cell lines, HCT-8, HT-29, and HCT-116, and one breast cancer cell line, MCF-7, were 1-2 logs less sensitive to ET-743 than the STS cell lines. Cell lines were also characterized as to expression of oncogenes and tumor suppressor genes to attempt to correlate sensitivity of these cell lines to ET-743 and other chemotherapeutic agents. All of the cell lines except M8805, a malignant fibrous histiocytoma cell line, had mutations in p53 and/or overexpressed the MDM2 protein. Only HS-18, a liposarcoma cell line, lacked expression of the retinoblastoma protein. None of the cell lines had detectable expression of Pglycoprotein as measured by immunohistochem. ET-743 is an extremely potent cytotoxic agent against human STS cell lines and is being evaluated as an antitumor agent in this disease.

REFERENCE COUNT:

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN

21

ACCESSION NUMBER:

2001:380410 HCAPLUS Full-text

DOCUMENT NUMBER:

134:361352

TITLE:

Aplidine for treatment of cancers

INVENTOR(S):

Faircloth, Glynn Thomas; Twelves, Chris;

Paz-Ares, Luis

PATENT ASSIGNEE(S):

SOURCE:

Pharma Mar S.A., Spain PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.					KIN	DATE				APPLICATION NO.					DATE		
	2001	0359	74			2 20010525 3 20011101				WO 2000-GB4349					20001115		
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CA 2001-2424823

WO 2001-GB4555

A1

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CA 2424823

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ANSWER 25 OF 64

ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE:

AUTHOR(S):

WO 2002030441

WO 2002030441

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                                           AT 2001-974510
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    ES 2243555
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    AU 2001294024
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    NO 2002002293
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    MX 2002PA04862
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    BG 106714
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    NO 2003001673
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                                           MX 2003-PA3230
    MX 2003PA03230
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    US 2004010043
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PRIORITY APPLN. INFO.:
                                           GB 1999-27006
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                                           GB 2000-5701
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                                           WO 2000-GB4349
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                                           GB 2001-7373
                                                              A 20010323
                                           WO 2001-GB4555
                                                             W 20011012
     Aplidine demonstrates considerable promise in phase I clin. trials for
     treatment of tumors, and various dosing regimes are given. Tumor reduction
     has been observed in several tumor types including renal carcinoma, colorectal
     cancer, lung carcinoid, medullary thyroid carcinomas and melanoma. It has
     also been found that aplidine has a role in inhibiting angiogenesis,
     complementing the antitumor activity.
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20001115

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20001115

20011012

20011012

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Unique pattern of ET-743 activity in different
cellular systems with defined deficiencies in
DNA-repair pathways
Damia, Giovanna; Silvestri, Simonetta; Carrassa,
Laura; Filiberti, Laura; Faircloth, Glynn T.
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136:130300

HCAPLUS COPYRIGHT 2007 ACS on STN

2001:363160 HCAPLUS Full-text

; Liberi, Giordano; Foiani, Marco; D'Incalci, Maurizio

CORPORATE SOURCE: Department of Oncology, Instituto di Ricerche

Farmacologiche "Mario Negri", Milan, 20157, Italy

SOURCE: International Journal of Cancer (2001), 92(4), 583-588

CODEN: IJCNAW; ISSN: 0020-7136

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AΒ The cytotoxic activity of ecteinascidin 743 (ET-743), a natural product derived from the marine tunicate Ecteinascidia turbinata that exhibits potent anti-tumor activity in pre-clin. systems and promising activity in phase I and II clin. trials, was investigated in a number of cell systems with welldefined deficiencies in DNA-repair mechanisms. ET-743 binds to N2 of guanine in the minor groove, but its activity does not appear to be related to DNAtopoisomerase I poisoning as the drug is equally active in wild-type yeast and in yeast with a deletion in the DNA-topoisomerase I gene. Defects in the mismatch repair pathway, usually associated with increased resistance to methylating agents and cisplatin, did not affect the cytotoxic activity of ET-743. However, ET-743 did show decreased activity (from 2- to 8-fold) in nucleotide excision repair (NER)-deficient cell lines compared to NERproficient cell lines, from either hamsters or humans. Restoration of NER function sensitized cells to ET-743 treatment. The DNA double-strand-break repair pathway was also investigated using human glioblastoma cell lines MO59K and MO59J, resp., proficient and deficient in DNA-dependent protein kinase (DNA-PK), ET-743 was more effective in cells lacking DNA-PK; moreover, pretreatment of HCT-116 colon carcinoma cells with wortmannin, a potent inhibitor of DNA-PK, sensitized cells to ET-743. An increase in ET-743 sensitivity was also observed in ataxia telangiectasia-mutated cells. The data strongly suggest that ET-743 has a unique mechanism of interaction with DNA.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 26 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:855753 HCAPLUS Full-text

DOCUMENT NUMBER: 134:25353

TITLE: Uses of didemnins as immunomodulating agents

INVENTOR(S): Rinehart, Kenneth L.; Faircloth, Glynn

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 17 pp., Cont. of U.S. Ser. No. 664,234,

abadoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 6156724 A 20001205 US 1998-111190 19980707

PRIORITY APPLN. INFO.: US 1996-664234 B1 19960607

AB The invention is based on the immunomodulatory activity of synthetic and semi-synthetic didemnin compds. Certain didemnin compds. possess unexpectedly high immunomodulation activity and will be useful for modulating or regulating immunol. functions in warm-blooded animals. From the data provided, it is believed that the physician will be able to determine the appropriate dosage of the immunosuppressant didemnins of the present invention. The actual dosage to be administered depends, inter alia, on the animal species to be treated, the subject animal's size, and the capacity of the subject to use the particular didemnin compound administered. Accordingly, the actual amts. of

any didemnin compound required to be administered depend on the judgment of the practitioner.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 27 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN 2000:412188 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 133:129636

TITLE: Interference of transcriptional activation by the

antineoplastic drug ecteinascidin-743

Minuzzo, Mario; Marchini, Sergio; Broggini, Massimo; AUTHOR(S):

Faircloth, Glynn; D'Incalci, Maurizio;

Mantovani, Roberto

CORPORATE SOURCE: Dipartimento di Genetica e di Biologia dei

Microrganismi, Universita degli Studi di Milano,

Milan, 20133, Italy

Proceedings of the National Academy of Sciences of the SOURCE:

United States of America (2000), 97(12), 6780-6784

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

AB Ecteinascidin-743 (ET-743) is a tetrahydroisoquinoline alkaloid isolated from the tunicate Ecteinascidia turbinata currently under phase II clin. trials for its potent anticancer activity. ET-743 binds DNA in the minor groove and forms covalent adducts with some sequence specificity. It selectively inhibits in vitro binding of the CCAAT box factor NF-Y. In this study, the authors assayed ET-743 function in vivo on the HSP70 promoter. On heat induction, the drug blocks transcription rapidly at pharmacol. concns. and in a CCAAT-dependent manner, whereas the activity of the CCAAT-less simian virus 40 promoter is not affected. The effect is exerted at the mRNA level. The distamycin-like alkylating tallimustine is inactive in these assays. Binding of NF-Y and of the heat-shock factor is normal in ET-743-treated cells. on anal. of several endogenous genes further proves that the drug has rapid, profound, and selective neg. effects on transcription. Thus, this marinederived compound is a promoter-specific, transcription-interfering agent.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 28 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:412185 HCAPLUS Full-text

DOCUMENT NUMBER: 133:129635

TITLE: Ecteinascidin 743, a transcription-targeted chemotherapeutic that inhibits MDR1 activation

Jin, Shengkan; Gorfajn, Barbara; Faircloth, AUTHOR(S):

Glynn; Scotto, Kathleen W.

CORPORATE SOURCE: Molecular Pharmacology and Therapeutics Program,

Memorial Sloan-Kettering Cancer Center and the Weill

Graduate School of Medical Sciences of Cornell

University, New York, NY, 10021, USA

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2000), 97(12), 6775-6779

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

Ecteinascidin 743 (ET-743), a highly promising marine-based anti-tumor agent presently in phase II clin. trials, has been shown to interfere with the binding of minor-groove-interacting transcription factors, particularly NF-Y, with their cognate promoter elements in vitro. The authors have shown that

NF-Y is a central mediator of activation of transcription of the human P glycoprotein gene (MDR1) by a variety of inducers and that NF-Y functions by recruiting the histone acetyltransferase PCAF to the MDR1 promoter. In the present study, the authors tested whether ET-743 could block activation of the MDR1 promoter by agents that mediate their effect through the NF-Y/PCAF complex. The authors report that physiol. relevant concns. of ET-743 abrogate transcriptional activation of both the endogenous MDR1 gene and MDR1 reporter constructs by the histone deacetylase inhibitors as well as by UV light, with minimal effect on constitutive MDR1 transcription. Notably, this inhibition does not alter the promoter-associated histone hyperacetylation induced by histone deacetylase inhibitors, suggesting an in vivo mol. target downstream of NF-Y/PCAF binding. ET-743 is therefore the prototype for a distinct class of transcription-targeted chemotherapeutic agents and may be an efficacious adjuvant to the treatment of multidrug-resistant tumors.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 29 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1999:672566 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER:

131:295576

TITLE:
INVENTOR(S):

Spisulosine compounds having antitumor activity Rinehart, Kenneth Lloyd; Fregeau, Nancy Louise;

Warwick, Robert Arthur; Garcia Gravalos, Dolores;

Avila, Jesus; Faircloth, Glynn Thomas

PATENT ASSIGNEE(S):

The Board of Trustees of the University of Illinois,

USA; Ruffles, Graham Keith

SOURCE:

PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE		•						D.	ATE	
WO	9952	521			A1				,		1999-0				1	 9990	409
	W:	ΑE,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
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		CI,									TD,						
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	7639																
	9910																
TR	2000						2001	0122	•	TR 2	2000-	2000	0295	5	1	9990	409
ΕP	1069	894			A1		2001	0124		EP 1	999-	9158	98		1	9990	409
EΡ	1069						2005										
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				LT,	-												
JP	2002	5114	10		T		2002	0416		JP 2	2000-	5431	31		1	9990	409
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ES	2248	995			Т3		2006	0316		ES 1	999-	9158	98		1	9990	409

NO 2000005052	Α	20001207	NO	2000-5052		20001006
MX 2000PA09930	Α	20020424	MX	2000-PA9930		20001010
BG 104935	Α	20010731	BG	2000-104935		20001109
BG 64970	B1	20061130				
PRIORITY APPLN. INFO.:			US	1998-58456	Α	19980410
			US	1997-43326P	P	19970415
			US	1997-43599P	P	19970415
			WO	1999-GB1091	W	19990409

Investigation of the activity of exts. of the clam Spisula polynyma has led to AB antitumor long-chain, straight-chain alkane or alkene compds. which have a 2amino group and a 3-hydroxy group.

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 30 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN L71999:625555 HCAPLUS Full-text ACCESSION NUMBER:

7

DOCUMENT NUMBER:

131:317437

TITLE:

Effect of ecteinascidin-743 on the interaction between

DNA binding proteins and DNA

AUTHOR(S):

Bonfanti, Marina; La Valle, Elisa; Faro, Jose-Maria

Fernandez Sousa; Faircloth, Glynn; Caretti,

Giuseppina; Mantovani, Roberto; D'Incalci, Maurizio

CORPORATE SOURCE:

Department of Oncology, Istituto di Ricerche Farmacologiche Mario Negri, Milan, 20157, Italy

SOURCE:

Anti-Cancer Drug Design (1999), 14(3), 179-186

CODEN: ACDDEA; ISSN: 0266-9536

PUBLISHER:

Oxford University Press

DOCUMENT TYPE: Journal LANGUAGE: English

Ecteinascidin-743 (ET-743) is a tetrahydroisoquinoline alkaloid isolated from Ecteinascidia turbinata, a tunicate growing in mangrove roots in Caribbean. It has been shown to bind in the minor groove of DNA forming covalent adducts by reaction of the N2 of guanine with the carbinolamine moiety. We investigated ET-743 ability to inhibit the binding of different transcription factors to their consensus sequences by using gel shift assays. We have selected three types of factors: (i) oncogene products such as MYC, c-MYB and Maf; (ii) transcriptional activators regulated during the cell cycle as E2F and SRF; and (iii) general transcription factors such as TATA binding protein (TBP), Sp1 and NF-Y. We observed no inhibition of the binding of Sp1, Maf, MYB and MYC. Inhibition of DNA binding was observed for TBP, E2F, SRF at ET-743concns. ranging from 50 to 300  $\mu M$ . The inhibition of binding of NF-Y occurs at even lower concns. (i.e. 10-30  $\mu M$ ) when the recombinant subunits of NF-Y are preincubated with the drug, indicating that the inhibition of NF-Y binding does not require previous ET-743 DNA binding. Since NF-Y is a trimer containing two subunits with high resemblance to histones H2B and H2A, we have investigated the effect of ET-743 on nucleosome reconstitution. ET-743 caused a decrease of the nucleosomal band at 100 nM, with the complete disappearance of the band at 3-10  $\mu M_{\odot}$  . These data suggest that the mode of action of this novel anticancer drug is related to its ability to modify the interaction between some DNA binding proteins and DNA.

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 31 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:566537 HCAPLUS Full-text DOCUMENT NUMBER:

31

TITLE:

AUTHOR(S):

131:208780 Cytotoxicity and neurocytotoxicity of new marine

anticancer agents evaluated using in vitro assays Geldof, Albert A.; Mastbergen, Simon C.; Henrar,

Roland E. C.; Faircloth, Glynn T.

CORPORATE SOURCE: Dep. Urology/Nuclear Med., Vrije Univ. Amsterdam,

Amsterdam, 1007 MB, Neth.

SOURCE: Cancer Chemotherapy and Pharmacology (1999), 44(4),

312-318

CODEN: CCPHDZ; ISSN: 0344-5704

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

New classes of anticancer drugs, isolated from marine organisms, were shown to AΒ possess cytotoxic activity against multiple tumor types. Aplidine, didemnin B, and isohomohalichondrin B (IHB), among the more promising antitumor candidates, were evaluated in the present study on a comparative basis in terms of their antiproliferative activity and neurotoxic effects in vitro. Using a panel of different human prostatic cancer cell lines (DU 145, PC-3, and LNCaP-FGC) the effects of aplidine, didemnin B, and IHB on tumor cell proliferation were tested in a colorimetric (XTT) assay and compared with the effects of vincristine, vinorelbine, and taxol. Under analogous in vitro conditions these drugs were also monitored for neurocytotoxic effects using a PC 12 cell line based model. Didemnin B and - especially aplidine were more effective in the inhibition of prostate cancer cell proliferation than vincristine, vinorelbine, or taxol at concentration levels between 5-50 pmol/mL. At these same concns., however, didemnin B and aplidine were also most potent in the in vitro neurotoxicity assays. IHB was found to exert even more potent antiproliferative activity (at concentration levels between 0.05-0.1 pmol/mL). However, neurotoxic effects were also found to be present at these levels. After drug withdrawal, the neurotoxic damage, inflicted by aplidine or IHB appeared to be more long lasting than after vincristine or vinorelbine exposure. These results point to high antiproliferative activity of aplidine and IHB in prostate cancer. At the same time, the data urge some caution in the clin. use of these agents because of potential neurotoxic sideeffects. The use of a newly formulated aplidine may involve a more favorable therapeutic profile.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 32 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:432824 HCAPLUS Full-text

DOCUMENT NUMBER: 131:179198

TITLE: Bioanalysis of aplidine, a new marine antitumoral depsipeptide, in plasma by high-performance liquid

chromatography after derivatization with

trans-4'-hydrazino-2-stilbazole

AUTHOR(S): Sparidans, Rolf W.; Kettenes-Van Den Bosch, J.

Jantien; Van Tellingen, Olaf; Nuyen, Bastiaan; Henrar,

Roland E. C.; Jimeno, Jose M.; Faircloth, Glynn; Floriano, Pablo; Rinehart, Kenneth L.;

Beijnen, Jos H.

CORPORATE SOURCE: Faculty of Pharmacy, Department of Pharmaceutical

Analysis, Utrecht University, Utrecht, 3584 CA, Neth. Journal of Chromatography, B: Biomedical Sciences and

Applications (1999), 729(1 + 2), 43-53

CODEN: JCBBEP; ISSN: 0378-4347

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

A sensitive bio-anal. assay in plasma of the depsipeptide aplidine is reported, based on reversed-phase liquid chromatog. and fluorescence detection of the trans-4'-hydrazino-2-stilbazole (4'H2S) derivative of the analyte. At ambient temperature, two conformations of the depsipeptide are observed in

solution due to cis-trans isomerism at the proline-pyruvoyl peptide bond. Aplidine is isolated from the matrix by solid-phase extraction on an octadecyl modified silica stationary phase. After evaporation of the acetone eluate, a derivatization with 4'H2S is performed in a water-acetonitrile mixture at pH 4. The reaction mixture is injected directly into the chromatograph and the analyte is quantified by fluorescence detection at 410 and 560 nm for excitation and emission, resp. The method has been validated in the 2-100 ng/mL-range, 2 ng/mL being the lower limit of quantification. Precision and accuracy both meet the current requirements for a bioanal. assay. The identity of the 4'H2S reaction products of aplidine have been confirmed by mass spectrometric anal. Finally, the method has been employed for a pilot pharmacokinetic study of aplidine in mice which demonstrated its usefulness for pharmacol. research.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 33 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:300619 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 131:82490

TITLE: Bioanalysis of thiocoraline, a new marine antitumoral

depsipeptide, in plasma by high-performance liquid

chromatography and fluorescence detection

AUTHOR(S): Sparidans, Rolf W.; Henrar, Roland E. C.; Jimeno, Jose

M.; Faircloth, Glynn; Floriano, Pablo;

Beijnen, Jos H.

CORPORATE SOURCE: Faculty of Pharmacy, Department of Pharmaceutical

Analysis, Utrecht University, Utrecht, 3584 CA, Neth. Journal of Chromatography, B: Biomedical Sciences and

Applications (1999), 726(1 + 2), 255-260

CODEN: JCBBEP; ISSN: 0378-4347

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

AB A sensitive bioanal. assay for thicoraline, an investigational marine anticancer agent, in plasma, based on reversed-phase liquid chromatog. and fluorescence detection, is reported. The proteins in the sample are precipitated by the addition of acetonitrile. After centrifugation, the supernatant is injected directly into the chromatograph. The analyte is quantified by fluorescence detection with excitation and emission at 365 and 540 nm, resp. The method has been validated in the 1-100 ng/mL range, 1 ng/mL being the lower limit of quantification. Precision and accuracy both meet the current requirements for a bio-anal. assay and are <15% at 1 ng/mL and ≤5% in the 5-100 ng/mL range. Plasma samples can be stored for at least 4 mo at -800C. Finally, the usefulness of this method for pharmacol. research was shown in a pilot study of the pharmacokinetics of thiocoraline in rats.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 34 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:744958 HCAPLUS Full-text

DOCUMENT NUMBER: 130:10633

TITLE: Aplidine as an L-type calcium channel enhancer

INVENTOR(S): Crumb, William J.; Faircloth, Glynn T.

PATENT ASSIGNEE(S): Pharma Mar, S.A., Spain SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
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    WO 9850048
                              19981112 WO 1998-US9238
                        A1
                                                              19980506
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, UZ, VN, YU, ZW
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, ML, MR, NE, SN, TD, TG
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                              20000229 US 1998-73288
20000301 EP 1998-920293
    US 6030943
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    EP 981352
                       A1
                                                               19980506
        R: AT, BE, CH, DE, DK, ES, GB, IT, LI, SE, PT, IE, FI
    JP 2001526657 T 20011218
                                       JP 1998-548441
                                                               19980506
PRIORITY APPLN. INFO.:
                                         US 1997-45803P
                                                            P 19970507
                                         WO 1998-US9238
                                                            W 19980506
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This invention relates to a cardiotonic effect of Aplidine (dehydrodidemnin B). Aplidine has been found to be a potent L-type calcium channel enhancer in the human heart. This effect makes Aplidine a very useful drug for the treatment of congestive heart failure, as well as useful for the treatment of atrial fibrillation. Extraction and isolation if Aplidine from Aplidium albicans, its semisynthesis from didemnin B, and its synthesis from pyruvyl-Pro-OBz and EDC or DMAP are presented.

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 35 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:565299 HCAPLUS Full-text DOCUMENT NUMBER: 129:270190

1

TITLE:

Ecteinascidin-743, a new marine natural product with potent antitumor activity on human ovarian carcinoma

xenografts

AUTHOR(S): Valoti, Giorgio; Nicoletti, M. Ines; Pellegrino,

Antonio; Jimeno, Jose; Hendriks, Hans; D'Incalci,

Maurizio; Faircloth, Glynn; Giavazzi,

Raffaella

CORPORATE SOURCE: Mario Negri Institute for Pharmacological Research,

Bergamo, Italy

SOURCE: Clinical Cancer Research (1998), 4(8), 1977-1983

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal LANGUAGE: English

The antitumor activity of ecteinascidin (ET)-743, a novel marine natural product, was evaluated against a panel of human ovarian carcinoma xenografts characterized by different malignant behaviors and drug responsiveness in nude mice. These tumor models included three xenografts transplanted s.c. (HOC18, HOC22-S, and MNB-PTX-1) into nude mice, representing different levels of sensitivity to cisplatinum (DDP), which was used as reference drug for ovarian carcinoma, and two other xenografts (HOC22 and HOC8), which are highly malignant in the peritoneal cavity of nude mice, representing the growth pattern of this neoplasm. At the maximum tolerated dose of 0.2 mg/kg using an intermittent schedule of one i.v. injection every 4 days, ET-743 was highly active against HOC22-S (sensitive to DDP), inducing long-lasting, complete regressions, and against HOC18 (marginally sensitive to DDP), inducing partial

tumor regressions. Moreover, significant growth delay was observed in mice bearing late-stage HOC18 tumor (400-mg tumor weight; nonresponsive to DDP). ET-743, however, was not active against MNB-PTX-1, a tumor that is highly resistant to chemotherapy, including DDP. In the i.p. ovarian carcinoma xenograft model, ET-743 at the maximum tolerated dose induced complete tumor remissions in all mice bearing HOC22 tumor, with 25% histopathol. confirmed cures, and produced marginal tumor growth delay against HOC8. These results indicate that ET-743 is a potent drug against ovarian carcinoma xenografts, being equally as active or more efficacious than DDP in the same tumor line. Our findings with human ovarian carcinoma xenografts justify clin. assessment of this drug with this tumor target.

REFERENCE COUNT:

THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 36 OF 64 HCAPLUS COPYRIGHT 2007 ACS on STN 1997:741343 HCAPLUS Full-text ACCESSION NUMBER:

22

DOCUMENT NUMBER:

128:34621

TITLE:

In vivo immunosuppressive activity of some

cyclolignans

AUTHOR(S):

Gordaliza, Marina; Castro, M. Angeles; Miguel del

Corral, Jose M.; Lopez-Vazquez, M. Luisa; San

Feliciano, Arturo; Faircloth, Glynn T.

CORPORATE SOURCE:

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Several podophyllotoxin-related cyclolignans, e. g. I, II and III (R1 = H, Ac, AB R2 = R3 = H; R1 = H, Ac, R2 = OH, OAc, R3 = H; R1 = H, Ac, R2 = H, R3 = OH, OAc), have been prepared and evaluated for their immunosuppressive (IMS) activity in the mouse allogeneic MLR in vitro test and in the in vivo techniques Graft vs Host Reaction (GVHR) and Skin Grafting (SG). The results obtained show that three cyclolignans fairly prevent splenomegaly in comparison with control animals and also promoted tolerance to grafting, being the first time that the in vivo IMS activity of cyclolignans is reported. 29

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